


Management Accounting
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Lecture 18: Cash Budget- 3

Welcome students, so in the previous class, we were preparing the cash budget, we were learning how to prepare the cash budget and where we left in the previous class was that since it is the say quarterly budget for three months that is June, July and August. So after preparing the say sales budget, sales collection budget, purchase budget and purchase disbursement budget, and the other expenses budget, so we were at the cash budget, and we started preparing the cash budget for the first month of the quarter, that is a month of June.

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Particulars	Cash Budget		
	June	July	August
opening balance of cash	\$29,000		
less: minimum balance desired	\$25,000		
Cash avail. for op.	\$4,000		
Cash receipts / Dis-			
collections from sales	\$376,000		
payments for purchase	(420,000)		
" " S.W. acc.	(140,000)		
" " O.V. exp.	(280,000)		
" " fixed exp.	(60,000)		
" " fixtures	(50,000)		
Net Cash (D).	(\$322,000)		
Excess / Deficit of cash	(\$3,000)		



And where we left in that last class was that after showing that how much is opening balance of the cash and then minimum cash balance required or to be kept was 25,000. So cash available for the current operations was 4,000 dollars. Then we put here the say collections from the sales which were 376,000 dollars and payment for the different accounts, and then finally we found out that there is now the negative balance. If you compare the, say total receipts and payments in terms of cash, then there we have

founded out that our payments have say, you can call it as being extra more than that what we received then our collections.

So, we have to means find out here that the net balances maybe if you find it out the net cash received or disbursed that how much was received, how much was disbursed, if you find that the difference, we found out that this is 322,000 dollars is a negative balance we had because we paid more and or we had to pay more we received less. So, the net balance was 322,000 or 322,000 negative balance. So, in this balance, we use this amount of how much this is 4,000 dollars.

So, if you use this which is available for the current operations, so your deficit of the cash comes down from the 322,000 dollars to 318,000 dollars. So, it means now this much of the cash has to be arranged from some other source, because it will not be available internally in the organization, we have to arrange it from some other sources, external sources, and from where it will be arranged, we all can understand that it will be arranged from the financing arrangement.

So we will have to make the financing arrangement and which is clearly given in the case that if there is a shortage of the cash, you can borrow it from the bank and if there is a excess of the cash that can be returned back to the bank or deposited in the bank and borrowing and deposit of the cash has to be in the beginning of month and whatever the say interest we pay on that, that has to be in the multiple of 10 dollars and whatever the principal be returned back to the bank that has to be in the multiple of 1,000 whether we returned back to the bank or we borrow from the bank, that has to be in the multiple of 1,000 dollars.

So, now we have found out in the month of June that we have a negative balance of 318,000, which we have to arrange from somewhere that is a beauty of this budget that we know in advance, before actually means say starting the operations or we reach up to the operations of for the month of June, we know it in advance that when it will come the month of June our receipts will be less, our payments will be more so there will be a negative balance of 318,000 dollars, which we have to arrange from some source.


That is why it is given in the case that the borrowing has to be in the beginning of the month. So we know it already from the budget that how much is going to be able our shortfall? That is 318,000 dollar which we have to arrange from some source and for that we need the financing arrangements. So, on the next sheet we will continue with for the month of June and then we will come back then we will prepare the month of budget for the month of July, will go till the end of July.

So we are means continuing this, this particular budget, cash budget into the two sheets, so I am going to the next sheet but we are continuing with the month of June, we have not moved to the month of July yet. So, I will finally calculate starting with opening balance for the month of June, I will calculate the closing balance for the month of June of that is a closing balance of the cash for the month of the June, whether it is from the internal collections or from the borrowings.

Whatever the amount of the cash is left with us at the end of the month of June that closing balance of the cash will become the opening balance for the month of July. So we have to find out the closing balance of the cash for the month of June. So I am continuing with the month of June, but on the next sheet right. So and will again come back to this sheet. So, again, I am continuing with the cash budget.

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Cash Budget			
Particulars	June	July	August
<u>Financing Arrangements</u>			
Borrowing of Cash from bank in the beginning of month	\$318000		
Int. Payment @ 1%	—		
Repayment of Int.	—		
Total Cash in/Dec. after financing	\$318000		
Closing cash balance	\$25000		



Particulars	Cash Budget		
	June	July	August
opening balance of cash	\$29000		
less: minimum balance desired	<u>(\$25000)</u>		
Cash avail. for op.	<u>\$4000</u>		
Cash receipts / Dis.			
collections from debtors	\$376000		
payments for purchase	(420000)		
" " S.W. exp.	(140000)		
" " O.V. exp.	(28000)		
" " fixed assets	(65000)		
" " fixtures	(55000)		
Net Cash (D).	<u>(\$322000)</u>		
Excess / Deficit of cash	<u>(\$318000)</u>		



So, in this case, we have written particular so it means now it is the cash budget and again we are doing the almost same thing that is particulars, then it is again June, then it is July and then it is August right, these are the three months again. So, now we are continuing with the month of June. So, what I am going to write here is that is now we are starting with the financing arrangements, financing arrangements.

So, financing arrangements, we are going to do what is the financing arrangement we are going to do here is that is something like say, for example, we had to now go for the borrowing of the cash, so borrowing of cash from bank, from bank in the beginning of the month, in the beginning of month and what is that month, the beginning of the month means borrowing of the cash in the beginning of the month, and that borrowing is how much we are doing?

That shortfall is of 318,000 dollars we are borrowing right; next column will have to make it that is the interest payment, interest payment at the rate of 10 percent. So, since we are boring here in the month of June, so we are not returning anything. So we will not be paying interest. So, I am keeping it open, but we need this column for the next month. So, I am preparing this column. So nothing is going to be there and then is the say a total or you can call it as the repayment of the interest and then the repayment of principle, repayment of principle.

So, repayment of principle is also not going to be here, because we are borrowing in the month of June, in the beginning of the June. So, it means in this case, we are only borrowing so borrowing of cash from bank in the beginning of the month 318,000, interest payment will come only if we return any loan in case of surplus funds available then we will calculate the interest and then we will return the principal also.

So, we are not going to make the columns here for means, we are not going to put any figures but we have to make the columns because in the month of July there may be surplus we have to return then we will have not to borrow, then we will put the dash here, then we will have to return because we have the surplus cash. So we will use their surplus cash for making the payment back to the bank.

So, then we will calculate the interest and the principal payment will put the figures here and then find out the closing cash balance, right. So, now you write here total cash increase/decrease, total cash increase/decrease after financing, after financing. So, it means what has happened now? You put here that is that total cash increase after financing is 318,000 dollars.

So we have calculated here that is a 318,000 dollars, just because of borrowing we have here and finally you have to put here as the last amount is the closing cash balance, closing cash balance. So, how much is the closing cash balance now, the closing cash balance with us is we are borrowing from the bank because if you go to the previous sheet, we had a shortfall of 318,000 dollars we went to the bank we borrowed from the bank 318,000 dollars.

We use that so total cash increase/decrease after financing 318,000 dollars this we will use for the current month's payments. So it means finally our total receipts plus borrowings will be equal to the payments. So, we have nothing to miss nothing left as outstanding to be paid to anybody, all the payments are made partly from our own sales collections, partly from the borrowing from the bank.

And finally, the closing cash balance left with you is that is only this much balance which we have kept as the minimum balance desired is 25,000 dollars. So, this is only amount


which is left with us this closing cash balances how much 25,000 dollars. This is the closing cash balance for the month of June right now, again, we go back and then we prepare the budget for the month of July.

Now for the month of July again you have to fill almost, now all the columns are prepared, you have to fill the figures only for the month of July and if we will fill the figure for the month of July. So, what is opening cash balance, which is the closing cash balance for the month of June. So, closing cash balance for the month of June is 25,000 dollars, this will become as the sorry, this will become as the opening cash balance for the month of July and this is how much 25,000 dollars, right, minimum cash desired is again 25,000 dollars that we have to keep this as a minimum cash balance.

So cash available for the operations is how much, zero there is no cash available from the say current month's opening balance there's nothing is available, because we have only 25,000 dollars we have to keep this 25,000 dollars for the as a minimum cash balance as a safety stock you can say so, nothing is available for the operations. Now we have to look for the collections, how much collections are there for the month of July.

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Particulars	Cash Budget		
	June	July	August
opening balance of Cash	\$29000	\$25000	
less: minimum balance desired	<u>(\$25000)</u>	<u>25000</u>	
Cash avail. for op.	<u>\$4000</u>	<u>0</u>	
Cash receipts / Dis-			
Collection from sales	\$376000	<u>\$67000</u>	
Payments for Purch.	(\$420,000)	(240,000) ✓	
" S. & M. exp.	(\$140,000)	(89,000) ✓	
" O. & M. exp.	(\$28000)	(6000) ✓	
" Fixed exp.	(\$55000)	(55000) ✓	
" Dividends	(\$55000)		
Net Cash & / D.	<u>(\$3,22,000)</u>	<u>\$71000</u>	
Excess / Deficit of Cash.	<u>(\$3,18,000)</u>	<u>\$216000</u>	



For that if you refer back to that sales collection schedule which we are prepared in the previous classes. From that schedule you can find out our collection for the month of July

is how much 607,000 dollars you look at refer to the sales collection schedule this amount is 607,000 dollars and in this case, we have to go for now the payments. So, what are the payments for purchases?

You go for the purchase disbursement schedule and in that case, we are making the payment for purchases is 240,000 rupees, this is the first payment for the purchases, then we have to pay for the salaries, wages and commission how much we have to pay this amount is? This amount we are paying is 80,000 in the month of July, which is also coming from that schedule and then how much we have to pay for the other variable expenses.

Other variable expenses have we have to pay at the rate of 4 percent and that amount works out as how much, this works out as say 16,000 right this amount is 16,000 dollars we are going to pay, so one payment we are making of 2,40,000 dollars and other payment we are making is about 80,000 dollars another payment we are making is of the 16,000 dollars anything we have to pay for the fixtures?

No, we have not to pay anything for the fixtures now, so fixtures and fixed expenses yes, now the fixed expensive you have to pay which is fixed all the times, we have to pay 55,000 dollars this we are paying for the fixture, we are not paying anything because only fixture was acquired and to be paid in the month of June which was acquired in the month of May and the payment for that we have to make in the month of June.

So, no fixture is coming up in July. So no payment has to be made for that, right. Now, you again total it up and try to find out this is the one figure that is a total collection and these are the total payments on, on four accounts, how you find out the net balance right, what I have written here is net cash received/disbursed. So, it means we have now if you total it up you will find that the net balance say here is that is dollars 216,000.

216,000 dollars is the positive balance now available with us, earlier it was negative balance, now our collections are more and our payments are less so there is positive balance of 216,000 dollars and excess or deficit of the cash right, excess or deficit of the

cash is how much, again this is the 216,000 dollars, this is excess of the cash now, I am not putting it in the bracket.

Earlier it was a deficit so we are putting it in the bracket, now it is a surplus positive figures so it is 216,000 I put it in the open without bracket. So, now excess is only we have no amount available here this is 0. So, only the surplus is 216,000 which has come in the month of July as a surplus from the sales collection and since the payments are less, disbursement are less as compared to the collections. So, we are left with the positive balance of how much, this balance is that 260,000.

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Cash Budget			
Particulars	June	July	August
<u>Financing Arrangements</u>			
Borrowing of Cash from bank in the beginning of month	\$318,000	—	—
Int. Payment @ 1%	—	(\$2,530)	—
Repayment of Int.	—	(\$212,000)	—
Total Cash in/Dec. after financing	\$318,000	215,530	—
Closing cash balance	\$25,000	—	—

Now we continue in the next statement for the month of July. And now we have to go for the financing arrangements. Now, if you go for the financing arrangements, borrowing from the bank in the beginning of the month, we have the surplus. So I to borrow from the bank, we are not going to borrow anything from the bank now. So, what we are going to do here in the financing arrangements, nil, we are not going to borrow anything.

But now, we have a surplus of how much, 216,000 dollars which we can make use of for paying the loan which we have borrowed from the bank in the month of June, we have borrowed how much 318,000 dollars but we are not in a position to pay this entire amount of 318,000 dollars, we have only a surplus of 216,000 dollars. So, it means we

can use this money that at least whatever amount is if there is a deficit you borrow from the bank in any month and if there is a surplus you deposit in the bank.

So that is borrowing and lending goes on and the business operations are smooth. So, we will have to use this 216,000 for paying part of the borrowing which we made in the previous month right. So, in this case, the condition is that when you return the principal back to the bank, you have to bifurcate it into two parts, whatever the surplus available 216,000, you cannot pay as a principal, you have to bifurcate into two parts, and you have to bifurcate in such a manner that interest in the multiple of rupees or dollar 10 and the principle in the multiple of dollar 1000 can be paid back and if any amount is left that will be added into the closing balance.

Now, we have a 216,000 dollars a surplus, we have to use here another trial and error method and with the help of trial and error method, we will have to find out that what could be the two best figures, what could be the two best figures which can, means very perfectly divide this total surplus into the principal payment and the interest payment and after this trial and error we have found out is, that if you pay the principal amount of how much out of 216,000 dollars if 212,000 dollars are paid as principal amount right, on this amount for a period of how many months?

Two months, we have borrowed 318,000 dollars out of that we are in a position now in the month of July to return 212,000 dollars so; it means we have to pay on this amount of 212,000 dollars which we use for how many months? Two months, June and July. So, we have to return this along with the interest and how much interest rate works out for the period of two months at the rate of 10 percent, this amount roughly rounded off figure works out as 3530 is the interest payment and how much we are paying as a principal 212,000.

So, this total amount works out as how much because these are the payments so we are putting it in the say bracket. So, it means how much is the total amount we are paying, total cash increase or decrease after financing so, it means whatever the total amount we are paying decreases how much is, decrease means paying back to the bank, increase means borrowing from bank.


So, how much is this amount, this amount works out as 215,530 or 215,530 rupees which we had paid back to the bank, where 212,000 is the principal amount and 3530 is the interest. So total amount works is say 215,530 rupees which we are returning back to the bank right. So, from this figure of 318,000 borrowings, we have returned by the end of July 212,000 rupees, so, the balance of 106,000 is left in the month of August.

Now, we have to find out the lastly in the month of July, what is the closing cash balance, closing cash balances how much, let us go back, this one amount 25,000 will be carried forward, so it will become here 25,000 plus out of this 216,000 how much we had the surplus 216,000 how much we utilize for paying back to the bank as a principal and interest 215,530, 215,530 we used.

So, it means from this amount of 2,16,470 rupees are left with us, we cannot use that, because we have to pay the to the bank in the multiple thousands so, it means after paying 212,000 and the interest on that we are left with 470 rupees or 70 dollars that will be added back here. So, your closing cash balance will be how much 25,470. So, this is our closing cash balance for the month of July, this is the closing cash balance for the month of July clear.

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Particulars	Cash Budget		
	June	July	August
opening balance of cash	\$29000	\$25000	\$25470
less: minimum balance desired	<u>\$25000</u>	25000	25000
Cash avail. for op.	<u>\$4000</u>	0 ✓	<u>\$470 ✓</u>
Cash receipts / Dis-			
collections from sales	\$376000	<u>\$67000</u>	<u>\$45000</u>
payments for purchase	(\$420,000)	(\$400,000) ✓	(\$240,000) ✓
" " " " " " " "		(\$8,000) ✓	(\$8,000) ✓
" " " " " " " "	(\$28000)	(\$6000) ✓	(\$16000) ✓
" " " " " " " "	(\$65000)	(\$5000) ✓	(\$5000) ✓
" " " " " " " "	(\$55000)	-	-
Net Cash & / D.	<u>(\$3,22,000)</u>	<u>\$710,000</u>	<u>\$62,000</u>
Excess / Deficit of cash	<u>(\$3,18,000)</u>	<u>\$716,000</u>	



Now, we go back and again prepare the budget for the month of August, if you prepare the budget for the month of August so, what is now the opening balance here, closing balance for the month of July is how much. 25,470 dollars and this will become now the opening balance for the month of August, this is 25,470 dollars is the opening balance, then minimum cash balance, we have to keep is that is 25,000 right, so now cash available for operations is how much 470,000 dollars cash available for the operations.

This is available, in the first month 4,000 dollars were available after keeping 25,000 as the safety stock of the cash, July we have nothing 0 because opening balance was just equal to the safety stock and in the month of August your opening balance is 25,470 which is more by 470 which is more than the safety balance of 25,000 so it means now we have this amount is dollar 470 are available with us as a amount of the cash available for the operations.

So we will see how we can utilize this amount, now let us go for this again same thing we are continuing, cash receipts/disbursements. Now, the receipts for the month of August is how much, if you look at the receipts for the month of August is go back to the sales collection schedule this amount works out as how much 454,000 dollars, 454,000 dollars this is the sales collection for the month of August or during the month of August.

How much payments we are going to make, that is for the material, again 240,000 we are going to pay right and on case of this expenses same figures 80,000 because sales figure is same, it means they have to be calculated in proportion to the sales and finally, how much we are going to pay here this is 16,000 right and then on account of the fixed expenses again the same thing we are going to pay that is 55,000 dollars.

Fixture is just nothing we are not having any fixture in month of July or in the month of August so no payment for that so again, you have to find out now that net cash received/disbursed, what is the net balance whether the receipts are more or the disbursements are no more or what is our net balance? If you find out this net balance here, you will find out that if you see these are the total collections and these four are the total payments, if you total up the total payments and subtracted from the total collections


of the 454,000 dollars this amount works out as how much, this amount works out as 63,000 dollars which is again a positive balance.

In this month also we have a surplus of how much 63,000 dollars this is the positive balance available with us in this month 63,000 dollars is the positive balance available with us. So it means, now how much is the total amount available, we have this amount of 470 dollars available for operations plus we have got surplus of 63,000 which is surplus of collections over payments, collections over disbursements.

So, now the total amount available with us is 63,470 dollars which can be used for the repayment of the balance of the loan. So now, what is the balance of the loan available with us now, how much that balance available, that loan available with us is you can use it this is the total amount is that is a excess of the, excess/deficit of the cash is 63,470 dollars right.

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Cash Budget			
Particulars	June	July	August
<u>Financing Arrangements</u>			
Borrowing of Cash from bank in the beginning of month	\$318,000	—	—
Int. Pay ment @ 1%	—	(\$2,530)	(1,530)
Repay ment of Pri.	—	(\$2,000)	(6,000)
Total Cash in/Dec. after financing	\$318,000	215,530	\$62,520
Closing cash balance	\$25,000	\$254,700	\$25,940



Let us go to the next statement continue with the for the month of August and let us talk about the financing arrangements, if you talk about the financing arrangements, first part is borrowing, we have a surplus. So, no need to borrow, we can use this to pay the remaining balance of the loan. So, how much is the total amount available, borrowing is nil again, like the month of July, we are not going to borrow anything for the month of

August, but we have this amount of 63,470 dollars which we can utilize for making the payment of the balance of the loan.

So, again, you have to use the trial and error method that out of that total 63,470, dollars how much can be paid as principle back to the bank and how much can be used out of that amount as the interest to be paid along with that principle. So, after the trial and error method, if you calculate the total amount, if you take it say, for example, we pay our principle of how much 61,000, we are paying it back to the bank 61,000.

Out of 63,000 dollars of the surplus we use 61,000 dollars to pay back to the bank to adjust the remaining loan of the 106,000 dollars. So, at least 61,000 more we will return back to the bank. So the balance will be left right, now 61000 we are returning as principle, then on this 61,000 how much principle, sorry interest will work out at the rate of 10 percent, and that interest if you work out at the rate of 10 percent on the amount of 61,000 rupees quality period of three months, that amount works out as how much, rounded off figure is that is 1530.

This is 1530 dollars so; we are returning this as the interest and this amount we are returning as the principle. So, total amount out of the 63,000 utilized is 62,530 so, it means 62,530 total cash increase or decrease, it is a decrease now, we are returning it back this works out as 62,530 dollars, 62,530 dollars, we have returned back to the bank along with the principle up 61,000 and interest of the 1530. So, the closing cash balance is how much, from this 63,000.

We are left with some amount and that amount is how much, 470 right, and how much is there with us this amount is 470, it is also not utilized anywhere. So it means 470 plus 470 plus 25,000 how much works, it works out as the closing cash balance will work out as 25,940, this is your closing cash balance for the month of August, 25,940 is the closing cash balance for the month of August.

So, this is how we prepared the cash budget for the three months, quarterly budget you can say or the 3 months in this quarter June, July, August, we had to prepare means the total budget, means ultimate purpose is, I talked to you that we can prepare two types of

the budget or the master budget has the two components. One component is operating budget, second component is the financial budget.

Operating budget the end of the operating budget is beginning of the operating budget is with the sales forecasting, means assessing the sales we are going to make in the market, then we prepare the respective schedule, sale schedule, then sales collection schedule, purchases schedule, purchase disbursement, other expenses schedule and the end of the operating budget is the income statement or the budgeted profit and loss account. This is the budgeting the profit and loss account for the quarter as a whole for the three months together and the end of the financial budget is budgeted balance sheet.


So, under for the financial budget, you have to prepare two statements, one is the cash budget, which we have prepared and the second part will be that is the end of the financial budget will be the budgeted balance sheet which will be preparing but first we will prepare the budgeted operating statement sorry, budgeted income statement or the budget profit and loss account and this will be the end of the operating budget. After that I will prepare for this problem, this case the budgeted balance sheet, which will be the end of the financial budget.

So, by preparing the budgeted profit and loss account or budgeted income statement, and the budgeted balance sheet, we will be ready with a complete budget, master budget for this quarter of three months, that is for the month of June, July, and August right. So, till now, we learned how to prepare different schedules and the cash budget. For the next part, we will start with this that is the preparation of the budgeted income statement, budgeted income statement.

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Budgeted Income Statement

Particulars	Amt. (Dr.)	Particulars	Amt. (Cr.)



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So this is the budget income statement or you can call it as budgeted profit and loss account. I am preparing it to the T format for the easy understanding, you can prepare in that vertical order also, means these days we are preparing in the vertical orders, but if I prepare in the T format, it will be very easy for you to understand. So, we will prepare first the format of this budgeted income statement and the format of budgeted income statement is something like this.

This is the format simply T format you must be seeing it though, normally, we prepared these days in the vertical format, but I am preparing in the T format because it will help us to understand the things in the better possible way right. So, this is the budgeted income statement, budgeted income statement has two components upper part is called as a trading account the lower part is called as the profit and loss account, it has the columns like this, this is the particulars, this is the amount, again it is particulars and this is the amount, this column is called us debit column DR.

And this column is called as the credit column which we signify with the help of CR that is the credit, so these are the two columns. And we have to prepare now the, we have to fill these one is the debit side, debit side takes into account all the expenses and losses and credit side takes into account all incomes and gains and then we try to find out the

difference between the this side and this side. And then we tried to find out if the income is more than the expenses.

So the difference is known as the profit. But if the expenses are more than the income, means debit side is bigger than the credit side. So the net balance is the loss but that loss is not calculated directly, we calculate that loss or profit into two steps. First step is preparing the upper part trading account of the income statement by preparing the trading account of the income statement, what we do is we prepare the, we take on the one side sales that is our income revenue of the firm and that's directly from the sales. On the other side we take that direct expenses three direct expenses that are my expenses on account of material, labor and other expenses.

And then we calculate the balance and that balance is called is that gross profit, but that gross profit is not the final profit from that gross profit, you have to say subtract some other expenses also which are called as indirect expenses. And then you have to add some indirect incomes also and finally, then you have to again balance the lower part and then it will be called as the final profit available at the end of that quarter which you can call it as available a profit for the firm, it can be called as a divisible profit, it can be called as a net profit or it can be called as a net operating profit.

But before tax, we are not means until unless you, say calculate the tax payable on that because every profit, corporate profit is subject to the tax to be paid to the government. So we are not given any information with regard to the tax here in this case. So we will calculate only the net operating profit before tax. And that will be that net result of this statement. That statement is called as the budgeted income statement or the budgeted profit and loss account.

So, I am preparing this format here and now stopping here and in the next class will fill up all these items here from the total say the whatever the information we have generated till now in the different schedule, in the say different you can call it as the information given in the case and that information will be brought here. And then we will try to find out that at the end of this quarter, we are ending up or we end up as a total balance as the

net profit or the net loss. So that income statement will prepare in the next class. Thank you very much.