ANAGRAMS 03

Welcome to the programming screen cast of anagrams, i hope you know what are ASCII values, i have explained in the previous video if you haven't watch the previous video please go through the previous video ASCII values basically represent character encoding each character is represented by some integer value ASCII basically stands for American standard code for information interchange this has already been exchanged in the previous video so please go through it now the questions comes how can we find the ascii values in python? How can we find the ASCII values of characters in python? So we have a pre defined function here called ord, ord we have a pre defined function here will be using this to find the ascii value of a particular character so i will just show you for example i need to find the ascii value of capital A so i will just write capital A we have sixty five as i already told you the ascii value of capital a is sixty five of b is sixty six, of c is sixty seven so we will just cross check whether it is giving us the right ascii values so here it is sixty six then capital c we have sixty seven now i will check the value of capital z which is basically ninety, yes it is ninety now we can also check the ascii values of lower case letters so i will just write small a here it is ninety seven that is correct then small b it is ninety eight small c ninety nine and let us also check the ascii value of small z and it is one twenty two yes we have the ascii values here this is how you can find the ascii value of a particular character as i already explained we also have the ascii values for some special symbols like sign of exclamation, @, percent, hash tag so we can also check so let us check for the sign of exclamation it is thirty three you can cross check in the table that we have shown here in the previous video you can cross check with the particular table now we have let us check for @ it is sixty four and for percent sign it is thirty seven for dollar it is thirty six for hash tag it is thirty five so this is how you can find the ascii values of a particular character and some special symbols too so i will advise you to cross check with the table that we have given in the previous video so now let us use this let us use this function to implement anagrams so as you know we have two strings and we need to find whether these two strings are anagram or not? So i will take two strings here i will take str1 and i will input enter the first string i will also take the another string str2 and i will write the input enter the second string second string as you all know by default it takes string as the input we don't need to type cast is as we do in the case of integer or decimal values whenever you have to take string as an input you don't need to type cast it you just write the input function input and in the round basis whatever message you want to display so here we are done we have the str1 and str2 we will compare this str1 and compare the str2 and find out whether these two strings are anagrams or not so let us think about it if we have to use the ascii values how can we use it some of the ascii values use of characters present in the anagrams should be same please think about it the some of the ascii values of the characters present in anagrams should be same because both the strings have same set of characters if two strings are anagrams then they should have the same set of characters for example i showed you one example cat and rat both of these strings comprise of three letters three characters R A and T so if we if i sum these values of these both strings the if this if i sum the ascii value of these both strings the answer should be same of the answer is same then these two strings are anagrams otherwise they are not so i will just now i will just write the code to how to sum the ascii values of the characters present in the string so will take

count one here i will initialise it to zero i will take the variable i here we will use while loop here i will run my loop till the length of string one since we are trying to sum of ascii values of str1 so i will take this while loop take this length of str1 and what should i write here? I should write here count of one is equal to count of one plus i will use the ord function here str1 of i so we have the count value here now the count one will store the sum of ascii values of the characters present in str1 i should increment the i value here so that it traverses whole of str1 then i will take count two also and this is zero similarly i will apply while loop here too in order to find the sum of ascii values of str2 i will write length of str2 i will write count two is equal to count two plus ord function str2 of i should also increment the i value here so now i think we are done with generating the some of ascii values of both the strings now i will write if count in one is equal to is equal to count two then i have to print these are anagrams anagrams else what do i need to print here i need to print these are not anagrams i will write these are not anagrams so i think we are done with the program what did we do here? We took two strings then we stored the some of the ascii values of the characters present in the both strings in count one and in count two respectively then we compare count one and count two if they are equal then these must be anagrams otherwise these are not anagrams so i will just run this so i will write anagrams dot py i should enter the first string for example i enter listen then i should enter silent as you know listen and silent these both make anagrams but it is saying that these are not anagrams i think we did a mistake here yes we haven't initialise i again please look at this we haven't initialise i again we incremented i here so we need to initialise i again because we are using the same variable in both the loops so it was a mistake here so please rectify it we need to initialise i here again so let me run it again i will write silent and listen, let us check whether it put yes these are anagrams these are right so let us let me run it again i will write some example which are not anagrams so i will write for example wet i will write rat these are not anagrams so our programme is giving us the right output so let me also show you what a count one and count two are storing here so you get to know that these are actually the same values count one here and i also print count two here so let us run again so let us take the strings which are anagrams so i will write rat then i will write tar so see these both count one is also three twenty seven count two is also three twenty seven so both are anagrams this should be same and our program is giving us the output these are anagrams since these we already know that these are anagrams so it is giving us the right output so this is how you can code for anagrams i will go through the program again. First of all we should take two strings str1 and str2 and our motive is to figure out whether these two strings are anagrams or not so i will just take one count that is the count one it will store the ascii values, sum of the ascii values of the characters present in the str1 i initialise the i is equal to zero then i had then i will have the while loop which will run till length of str1 and then we are storing the sum in count one and we are using the ord function to find the ascii values it will store the sum of the ascii values of the characters present in the str1 and then we are incrementing i here and i am printing the some of the ascii values here of str1 then we are initialising another variable that is count two which will store the sum of ascii values of the characters of str2 and then we also have i is equal to zero why do we need to do this because we have already incremented in the previous loop and we are using the same and we are using the same variable here so we need to initialise it again so i initialise it again so i wrote i is equal to zero then i again had a while loop which will count the number

the sum of ascii values present in str2 and then i printed these count two value and then i checked if count one is equal to is equal to count two if these both are equal then these are anagrams otherwise these are not anagrams so i hope you understood the logic behind it, what is the logic behind it? If two strings are anagrams then the sum of the ascii values of the characters present in the both the strings should be same this is self evident as i showed you we have different examples here silent listen tar rat and in silent and listen the set of characters present in the str1 and str2 they are same the ascii values should also be same so that's why we took the sum of all these ascii values and checked whether these two are equal if these are equal then the strings are anagrams otherwise they are not anagrams well there are many other ways in which with which you can find out whether two strings are anagrams or not! We like you to discuss on discussion form the other ways of how to find, how to figure out whether two strings are anagrams or not in the fourth coming screen cast i will be telling you one more way through which you can figure out whether two strings are anagrams are not. Thank you.