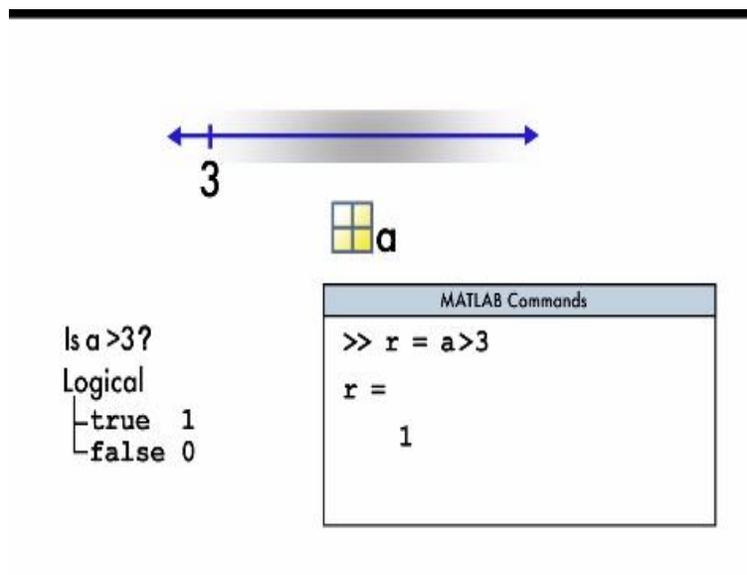


Logical Operators

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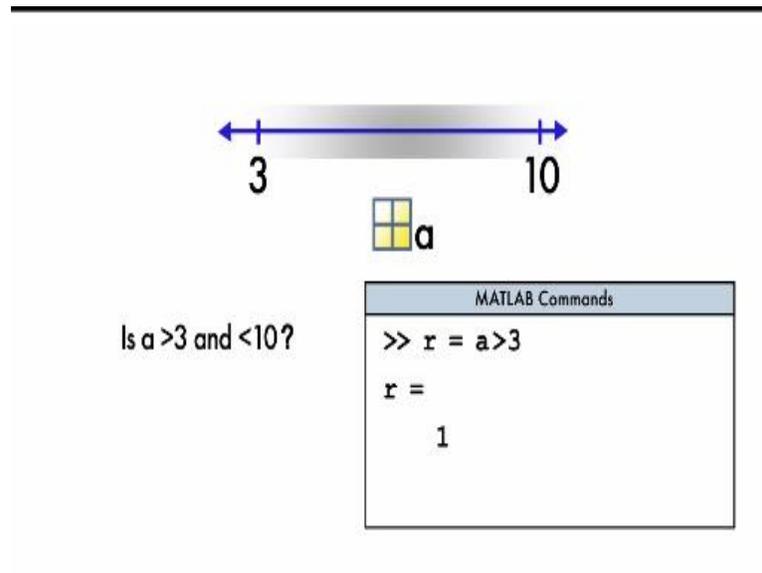
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In programming it is common to extract the data or control the program flow based on the results of certain conditions for example consider a MATLAB variable A let us say we want to perform a specific operation if $A > 3$, the first step in this process is to determine whether this condition is true or false to answer this question we use the relational operator greater than as shown in this expression.

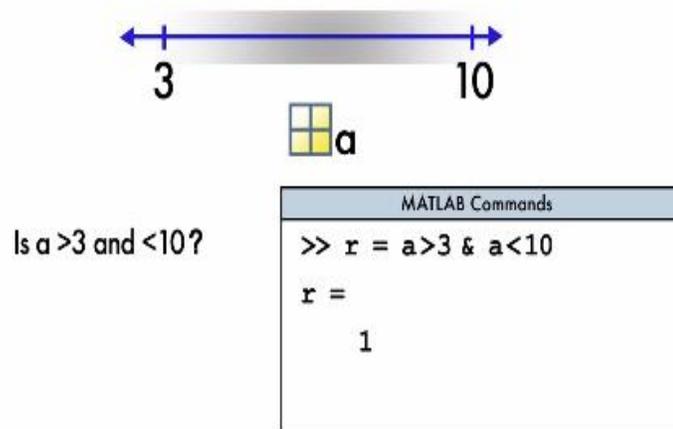
The result of this expression has the data type logical which only has a value of true or false in the display the true value is represented by one and the false value by 0.

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Now what if the problem we were solving had multiple conditions that need to be satisfied, for example how can we determine if A is both greater than 3 and less than 10.

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We can express these two conditions by combining the two expressions using an and operator the result of this expression will be true only if both the conditions are satisfied.

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Relational Operators		Logical Operators
> Greater than	< Less than	& And
== Equal to	~= Not equal to	 Or
>= Greater than or equal to	<= Less than or equal to	~ Not

In this example we used the relational operators greater than and less than and the logical operator and we can also use other relational and logical operators provided in MATLAB.

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