

## Conditional statements

- Control statements are the statements that control the flow of execution of statements so that they can be executed repeatedly and randomly
- Whenever we write a program it will execute linearly but in set of statement we add conditions it will break the linear execution and will execute the conditional statement ( if else ) then go further

### if

- First the condition is tested If condition is true it will execute . if block is false than it will execute else block .
- We can write one or more statement after colon ( : )
- if is false , then the statement mentioned after : are not executed
- Lets see the syntax :

```
if condition :  
    statements
```

- We can see in syntax there is indentation . Indentation is important in python . It is used in the beginning of the statement

### if else

- The if ....else executes statement evaluates test expression and will execute the block of if only when the test condition is True.
- If the condition is False, the body of else is executed. Indentation is used to separate the blocks.
- Lets see syntax for if else statement

```
if condition :  
    statement  
else :  
    statement
```

### Relational and logical operator :

- For writing the conditions we use relational and logical operators and the output will be always be " True " or " False "
- This is also called as comparison operators
- Lets take an example for better understanding

```
a = 10    b = 20
```

```
if a < b : T  
a <= b : T  
a > b : F  
a >= b : F  
a == b : F  
a != b : T
```

- Lets take an example by using if ... else

```
a = int ( input ( " enter a number " ) )  
if a < 0 :  
    print ( " Negative " )  
else :  
    print ( " Positive " )
```

Output : Negative

