

# Conditional Execution

Harish D. Gadade  
[www.harishgadade.com](http://www.harishgadade.com)



# Conditional Execution / Decision Making Statements

- *if* statements
- *if - else* statements
- *if - elif - else* Statements

# *If* Statements

- *Syntax*

```
if condition :  
    statement_1  
    statement_2
```

# If Statements

- *Syntax*

*if condition :*  
*statement\_1*  
*statement\_2*

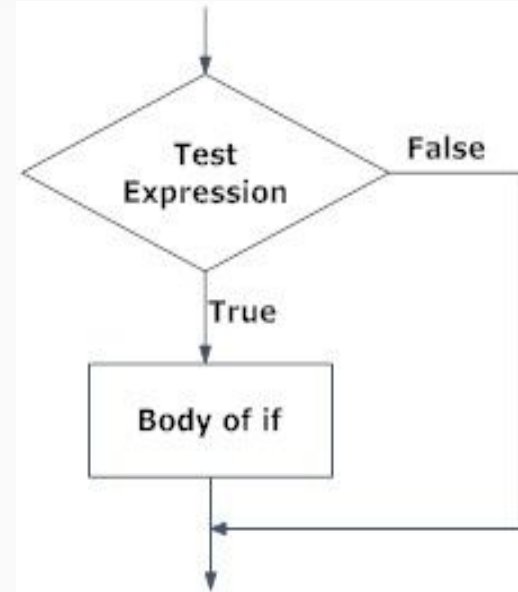


Fig: Operation of if statement

# If Statements

- *Syntax*

```
if condition:  
    statement_1  
    statement_2
```

- Example

```
If m%n != 0:  
    (m,n) = (n, m%n)
```

- Statement ( body of if ) will be executed when if condition is true...  
**i.e. m%n !=0** is True
- Indentation demarcates body of **if**
- Indentation must be uniform
- **:** represents end of **if** condition and start body of **if**

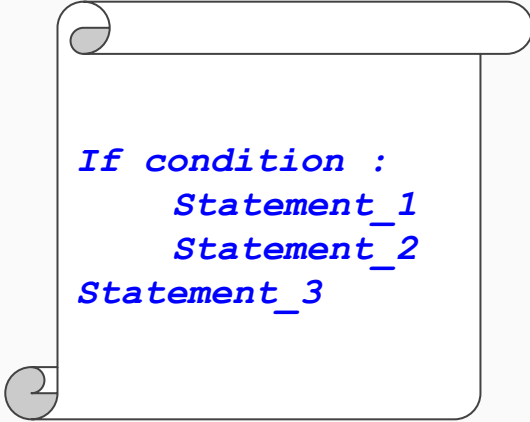
# If Statements

- *Syntax*

```
if condition :  
    statement_1  
    statement_2
```

- Example

```
If m%n != 0:  
    (m,n) = (n, m%n)
```



```
If condition :  
    Statement_1  
    Statement_2  
    Statement_3
```

# If - else Statements

- *Syntax:*

*if condition :*

*statement\_1*

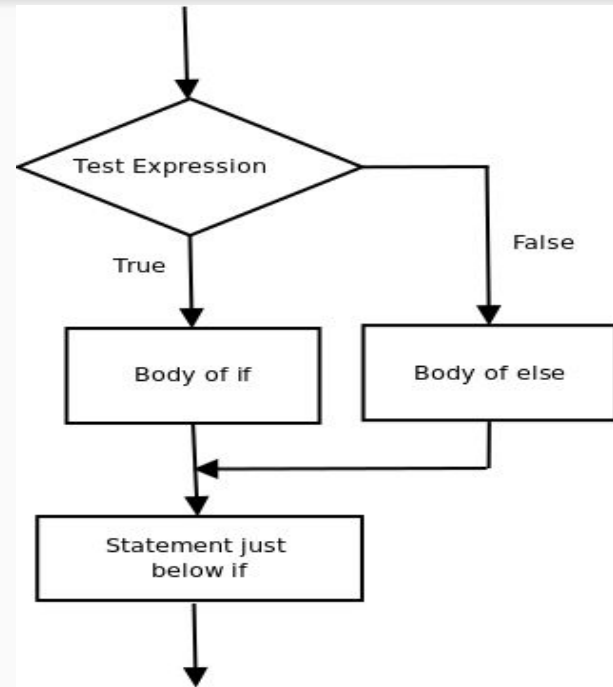
*Statement\_2*

*else:*

*Statement\_3*

*Statement\_4*

- Here *else* is Optional

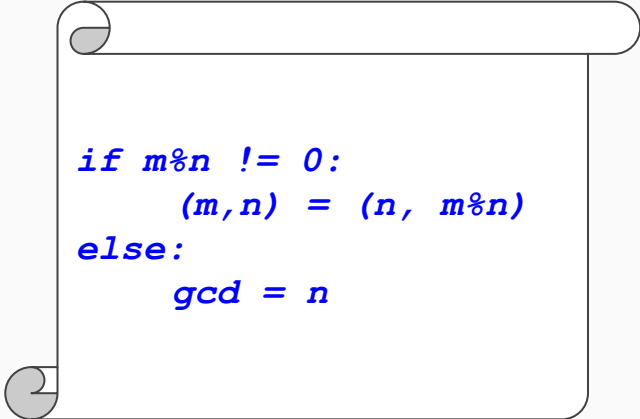


# If - else Statements

- *Syntax:*

```
if condition :  
    statement_1  
    Statement_2  
else:  
    Statement_3  
    Statement_4
```

- Here **else** is Optional



```
if m%n != 0:  
    (m,n) = (n, m%n)  
else:  
    gcd = n
```



# If - elif - else Statements

- *Syntax:*

```
if condition1 :  
    statement_1  
    statement_2  
elif condition2 :  
    statement_3  
    statement_4  
.....  
.....  
else :  
    statement_5
```

*Hands-on!!*

# Hands-on!!

1. Write a program that accepts two integer numbers and prints message " Equals" if both the entered numbers are equal.
2. Write a program that accepts a radius of a circle. If the radius of a circle is greater than zero then print the area and circumference of the circle.
3. Write a program that accepts two numbers and finds greater number.
4. Write a program to test whether a number is divisible by 5 and 10 OR 5 or 10.