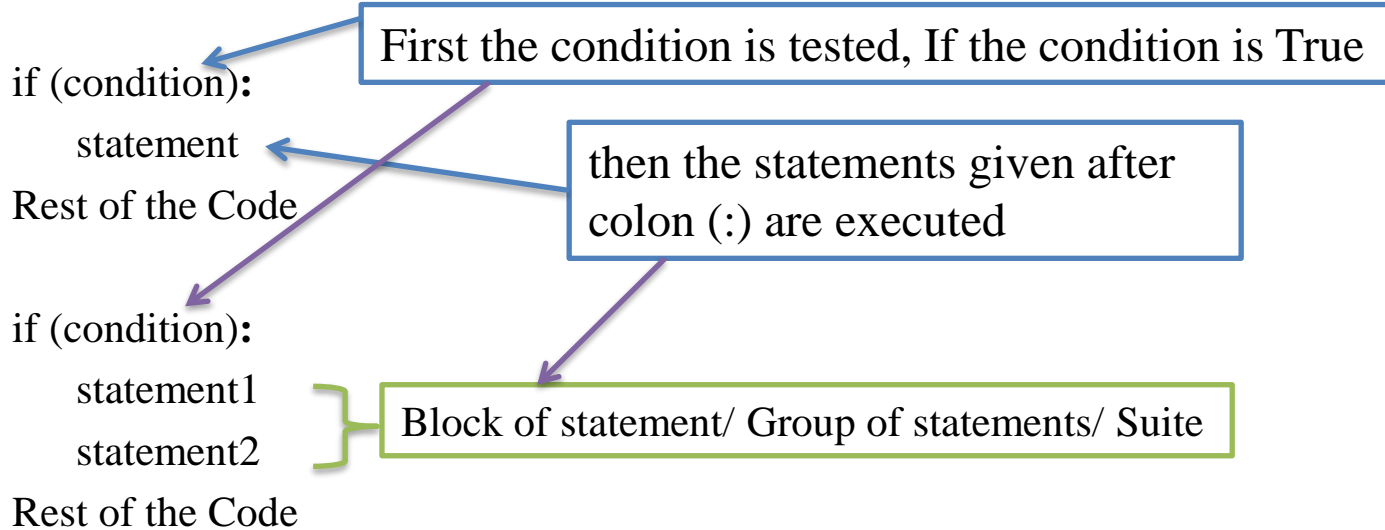


If Statement

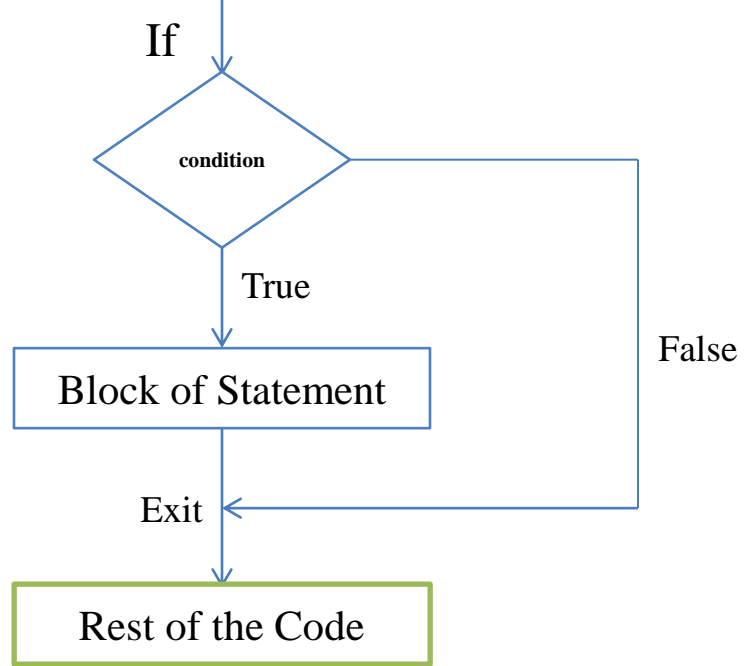
It is used to execute an instruction or block of instructions only if a condition is fulfilled.

Syntax: -



If there is single statement it can be written in one line.

Ex:- `if (condition): Statement`



Nested If Statement

Syntax :

```
if (condition):
```

```
    block of statements
```

```
    if(condition):
```

```
        block of statements
```

```
    if(condition):
```

```
        block of statements
```

```
if(condition):
```

```
    block of statements
```

```
Rest of the code
```

If Statement with Logical Operator

if ((condition1) and (condition2)):

Statement

Rest of the Code

if ((condition1) and (condition2)):

Block of Statements

Rest of the Code

if ((condition1) or (condition2)):

Statement

Rest of the Code

Indentation

Indentation refers to spaces that are used in the beginning of a statement. By default python puts 4 spaces but it can be changed by programmers.

```
if (condition):  
    Statement  
if(condition):  
    statement 1  
    statement 2  
if(condition):  
    Statement  
if(condition):  
    Statement 1  
    Statement 2  
Rest of the code
```

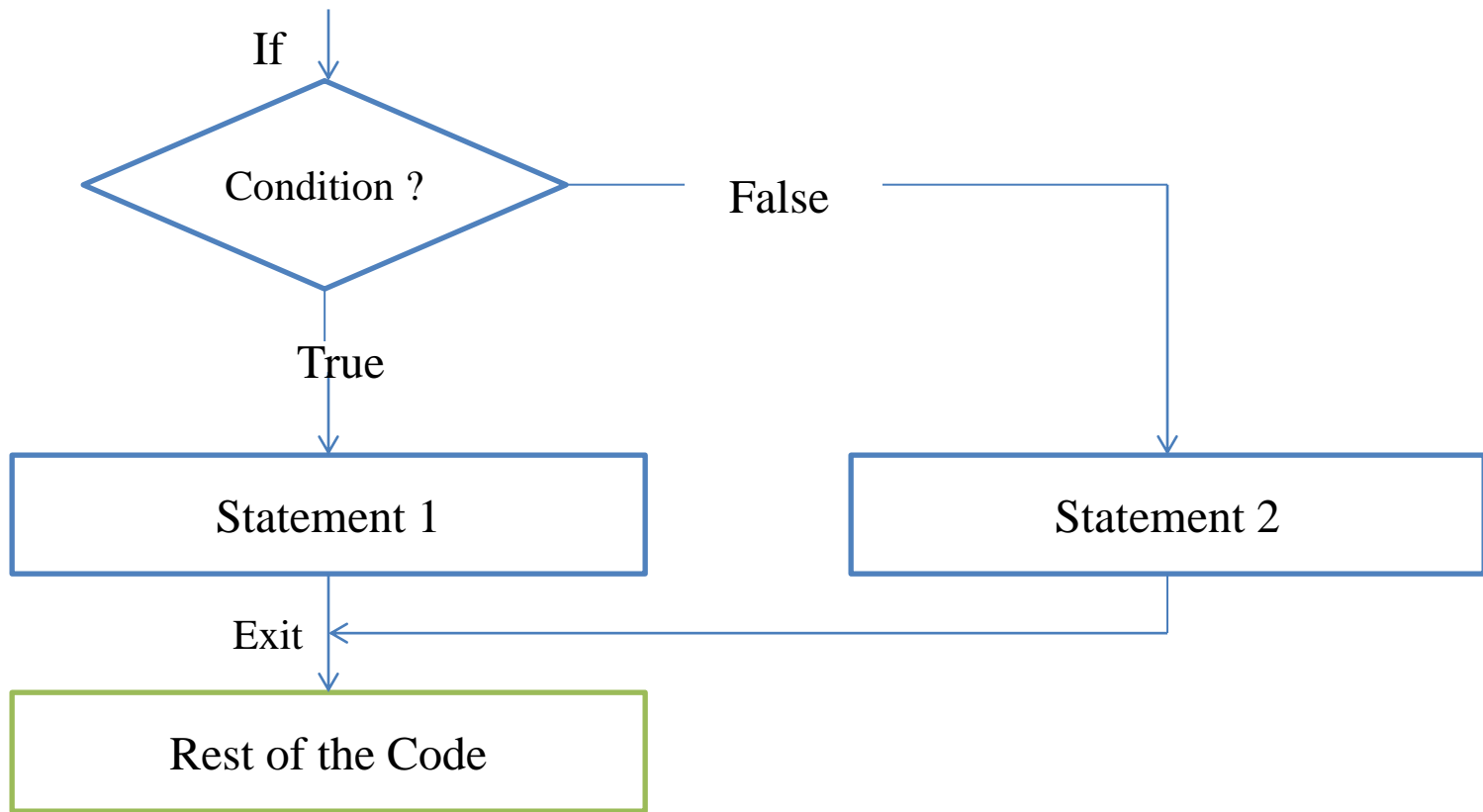
If Else Statement

if... else statement is used when a different sequence of instructions is to be executed depending on the logical value(True/False) of the condition evaluated.

Syntax: -

```
if(condition):  
    Statement 1  
else:  
    Statement 2  
Rest of the Code
```

```
if(condition):  
    Statement 1  
    Statement 2  
else:  
    Statement 3  
    Statement 4  
Rest of the Code
```



Nested If Else Statement

In nested if.... else statement, an entire if... else construct is written within either the body of the if statement or the body of an else statement.

Nested If Else Statement

```
if(condition_1):  
    if(condition_2):  
        Statement 1  
    else:  
        Statement 2  
else:  
    Statement 3  
Rest of the Code
```

```
if(condition_1):  
    if(condition_2):  
        Statement 1  
    else:  
        Statement 2  
else:  
    if(condition_3):  
        Statement 3  
    else:  
        Statement 4  
Rest of the Code
```

if elif Statement

To show a multi-way decision based on several conditions, we use if elif statement.

```
if (condition_1):
```

```
    Statement 1
```

```
elif (condition_2):
```

```
    Statement 2
```

```
elif (condition_3):
```

```
    Statement 3
```

```
elif (condition_n):
```

```
    Statement n
```

```
Rest of the Code
```

if elif else Statement

To show a multi-way decision based on several conditions, we use if elif else statement.

if (condition_1):

Statement 1

elif (condition_2):

Statement 2

elif (condition_3):

Statement 3

elif (condition_n):

Statement n

else:

Statements x

Rest of the Code

