

if elif else statements

Decision making is required when we want to execute a code only if a certain condition is satisfied.

The if...elif...else statement is used in Python for decision making.

Python if Statement Syntax

```
if test expression:  
    statement(s)
```

If the test expression gives true result then its corresponding statements gets executed otherwise that part of code gets skipped by the interpreter.

Example :

```
no = 11  
  
if no > 10:  
    print("No is greater than 10")
```

In above example control comes into if block as the condition is true.

Python if else Statement Syntax

```
if test expression:  
    Body of if  
else:  
    Body of else
```

The if..else statement evaluates test expression and will execute body of if only when test condition is True.

If the condition is False, body of else is executed. Indentation is used to separate the blocks.

Example :

```
no = 12  
  
if no >= 0:  
    print("It is positive number")  
else:  
    print("It is negative number")
```

In above syntax if no is greater than zero then we enter into if block otherwise we enter into else block.

Python if...elif...else Statement

if test expression:

 Body of if

elif test expression:

 Body of elif

else:

 Body of else

The elif is short for else if. It allows us to check for multiple expressions.

If the condition for if is False, it checks the condition of the next elif block and so on.

If all the conditions are False, body of else is executed.

Only one block among the several if...elif...else blocks is executed according to the condition.

The if block can have only one else block. But it can have multiple elifblocks.

Example :

```
no = 12
```

```
if no > 0:
```

```
    print("It is positive number")
```

```
elif no == 0:
```

```
    print("It is zero")
```

```
else:
```

```
    print("It is negative number")
```