

Training Report Day-9

15 June 2024

❖ Conditional Statement:-

Conditional Statements are statements in Python that provide a choice for the control flow based on a condition. It means that the control flow of the Python program will be decided based on the outcome of the condition.

In python there are five conditional statements are used:-

- ✓ IF STATEMENT
- ✓ IF...ELSE STATEMENT
- ✓ IF...ELIF STATEMENT
- ✓ IF..ELIF...ELSE STATEMENT
- ✓ NESTED IF

✓ IF STATEMENT:-

The if statement is the most basic form of conditional statement. It checks if a condition is true. If it is, the program executes a block of code.

Syntax-

```
if (condition) {  
    // code to execute if condition is true  
}
```

✓ IF...ELSE STATEMENT:-

The if-else statement extends the if statement by adding an else clause. If the condition is false, the program executes the code in the else block.

Syntax:-

```
if (condition) {  
    // code to execute if condition is true  
} else {  
    // code to execute if condition is false  
}
```

✓ IF...ELIF STATEMENT:-

The if-else if statement allows for multiple conditions to be checked in sequence. If the if condition is false, the program checks the next else if condition, and so on.

Syntax:-

```
if (condition1) {  
    // code to execute if condition1 is true  
} else if (condition2) {  
    // code to execute if condition2 is true  
} else {  
    // code to execute if all conditions are false  
}
```

✓ SWITCH STATEMENT:-

The switch statement is used when you need to check a variable against a series of values. It's often used as a more readable alternative to a long if-else if chain.

Syntax:-

```
switch (variable) {  
    case value1:  
        // code to execute if variable equals value1  
        break;  
    case value2:  
        // code to execute if variable equals value2  
        break;  
    default:  
        // code to execute if variable doesn't match any value  
}
```