Python - if Statement

Python If Statement

The **if statement** in Python evaluates whether a condition is true or false. It contains a logical expression that compares data, and a decision is made based on the result of the comparison.
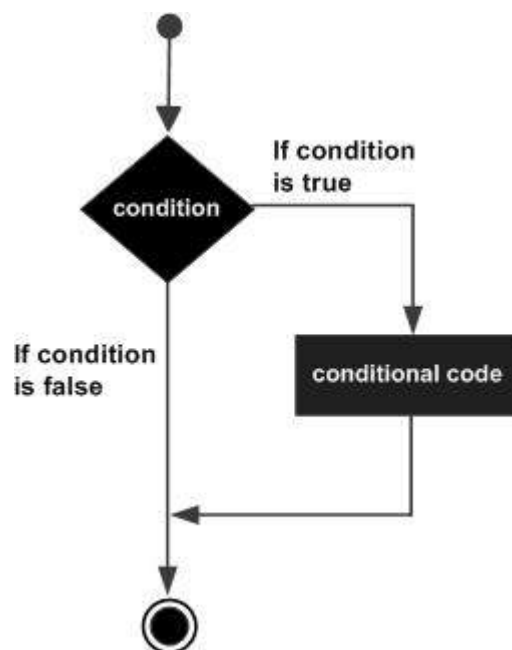
Syntax of the if Statement

```
if expression:
    # statement(s) to be executed
```

If the boolean expression evaluates to TRUE, then the statement(s) inside the `if block` is executed. If boolean expression evaluates to FALSE, then the first set of code after the end of the if block is executed.

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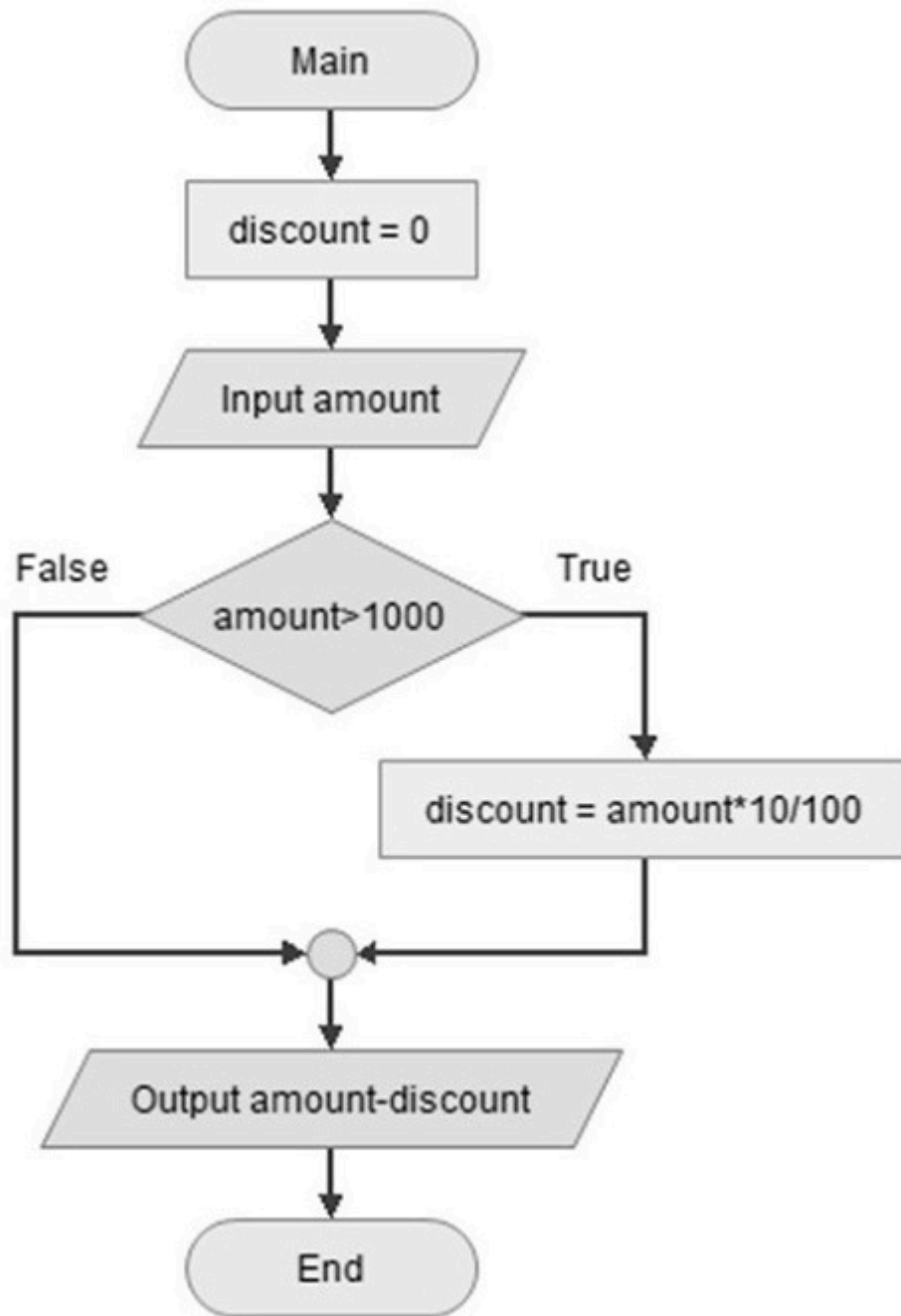
Flow Diagram (Flowchart) of the if Statement

The below diagram shows flowchart of the if statement −

Example of Python if Statement

Let us consider an example of a customer entitled to 10% discount if his purchase amount is > 1000; if not, then no discount is applicable. The following flowchart shows the whole

decision making process −

First, set a **discount** variable to 0 and an **amount** variable to 1200. Then, use an **if statement** to check whether the amount is greater than 1000. If this condition is true, calculate the discount amount. If a discount is applicable, deduct it from the original amount.

Python code for the above flowchart can be written as follows −

</>   Open Compiler

```python
discount = 0
amount = 1200
```

```
# Check he amount value
if amount > 1000:
    discount = amount * 10 / 100


print("amount = ", amount - discount)
```

Here the amout is 1200, hence discount 120 is deducted. On executing the code, you will get the following **output** −

amount = 1080.0

Change the variable amount to 800, and run the code again. This time, no discount is applicable. And, you will get the following output −

amount = 800