Conditional Statement: if else

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

- The if statement is used in Python for decision making.

Python if Statement Syntax

if test expression:
  statement(s)

- Here, the program evaluates the test expression and will execute statement(s) only if the text expression is True.

- If the text expression is False, the statement(s) is not executed.

- In Python, the body of the if statement is indicated by the indentation. Body starts with an indentation and the first unindented line marks the end.

- Python interprets non-zero values as True.

- None and 0 are interpreted as False.

Python if...else Statement

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.

Python if...elif...else Statement

if test expression:

    Body of if

elif test expression:

    Body of elif

else:

    Body of else

Python if...elif...else Statement

- 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 elif blocks.