CONDITIONALS

1. What are conditional statements?

Condition statements are a block of statements whose execution depends on a certain condition.

2. What are the different types of conditional statements in Python?

1. If:

A "simple if" condition is one where a block of statements get executed if the condition mentioned in the "if" statement evaluates to true

Example:

```
distance = 100
if distance == 100:
    print("Distance is 100")
```

2. If-Else:

An "If-Else" statement is one where a block of statements under "if" condition gets executed if the condition evaluates to true. If the condition evaluates to false, the block of statements under "else" is executed.

Example:

```
distance = 200
  if distance <= 100:
     print("Distance is less than or equal to
100")
  else:
     print("Distance is greater than 100")</pre>
```

3. If-Elif-Else

An "If-Elif-Else" statement is one where multiple "if" conditions are evaluated one after another if an "if" statement evaluates to false. "elif" stands for else-if. If all the if conditions evaluates to false, the block of statements under "else" gets executed.

Example:

```
distance = 400
  if distance <= 100:
      print("Distance is less than or equal to
100")
  elif distance <= 200:
      print("Distance is less than or equal to
200")
  elif distance <= 300:
      print("Distance is 300")
  else:
      print("Distance is greater than 300")</pre>
```

4. Nested If

An if statement within another if statement is called a nested if statement.

Example:

```
distance = 50
if distance < 100:
   if distance == 50:
     print "Distance is 50"</pre>
```