

1.What are the two values of the Boolean data type? How do you write them?

Ans: The two values of Boolean data type are True and False. We write them using T and F as capital and rest of the words in lowercase.

2. What are the three different types of Boolean operators?

Ans: and, or and no.

3. Make a list of each Boolean operator's truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluate ).

Ans:

True	And	True	True
True	And	False	False
False	And	True	False
False	And	False	False
True	Or	True	True
True	Or	False	True
False	Or	True	True
False	Or	False	False
True	Not	-	False
-	Not	False	True

4. What are the values of the following expressions?

Ans: (5 > 4) and (3 == 5) : False

not (5 > 4) : False

(5 > 4) or (3 == 5) : True

not ((5 > 4) or (3 == 5)) False

(True and True) and (True == False) : False

(not False) or (not True) : False

5. What are the six comparison operators?

Ans: <,>,<=,>=,==,!=

6. How do you tell the difference between the equal to and assignment operators? Describe a condition and when you would use one.

Ans: The difference between the equal to and assignment operators is that we use a single '=' sign for assigning something and use double '==' sign to compare values and obtain a Boolean result.

7. Identify the three blocks in this code:

```
spam = 0

if spam == 10:

    print('eggs')

if spam > 5:

    print('bacon')

else:

    print('ham')

    print('spam')

    print('spam')
```

Ans: Following are the three blocks In the above code

```
if spam == 10:

    print('eggs')

if spam > 5:

    print('bacon')

else:

    print('ham')

    print('spam')

    print('spam')
```

8. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and prints Greetings! if anything else is stored in spam.

Ans:

```
If(spam == 1):
```

```
    Print("Hello")
```

```
Elif (spam == 2):
```

```
    Print("Howdy")
```

```
Else:
```

```
    Print("Greetings!")
```

9.If your programme is stuck in an endless loop, what keys you'll press?

Ans: Ctrl+c

10. How can you tell the difference between break and continue?

Ans: The break statement will move the execution outside and just after a loop. The continue statement will move the execution to the start of the loop

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

Ans: They are all the same, The range(10) starts from 0 but does not include 10. The range(0,10) tells explicitly tells the loop to start at 0 and range(0,10,1) starts from 0 and explicitly tells the loop to take iterate variable by 1

12. Write a short program that prints the numbers 1 to 10 using a for loop. Then write an equivalent program that prints the numbers 1 to 10 using a while loop.

Ans:

1) for Loop:

```
for I in range (1 ,11):
```

```
    print(i)
```

2) While Loop:

```
I = 1
```

```
While i<=10:
```

```
    Print(i)
```

```
    i=i+1
```

13. If you had a function named `bacon()` inside a module named `spam`, how would you call it after importing `spam`?

Ans: `spam.bacon()`