

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

Ans: 2 values of Boolean data type: True and False

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

Ans: AND, OR and NOT are the 3 types of Boolean operators

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

A	B	AND	OR	NOT A
False	False	False	False	True
False	True	False	True	True
True	False	False	True	False
True	True	True	True	False

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

Ans: False

not (5 > 4)

Ans: False

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

Ans: True

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

Ans: False

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

Ans: False

(not False) or (not True)

Ans: True

5. What are the six comparison operators?

- a. less than
- b. greater than
- c. less than or equal to
- d. greater than or equal to
- e. equal to
- f. not equal to

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

Ans:

Assignment operator is used to assign a value to a variable

assignment operator example:

a=50

Equal to operator is used to check the equality condition

Equal to operator example:

If (a==50):

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:

Output:

Hamspamspam

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: If the program is running from command line, we can press control plus 'c'

Or

When writing a program, we can use break to exit or use a loop variable

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

Ans: Break exits the loop prematurely while continue skips the current iteration

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

Ans: All 3 will print the output: 0,1,2,3,4,5,6,7,8,9

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:

For loop

```
For i in range(1,11):
```

```
    Print(i)
```

While loop

```
i=1
```

```
while(i<=10):
```

```
    print(i)
```

```
    i++
```

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

Ans:

```
Import spam as s
```

```
s.bacon()
```