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

**Ans: True and False**

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

Ans: AND ,OR,NOT

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 ).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x | y | NOT(-x) | AND (&&) | OR(||) |
| 0 | 0 | 1 | 0 | 0 |
| 0 | 1 | 1 | 0 | 1 |
| 1 | 0 | 0 | 0 | 1 |
| 1 | 1 | 0 | 1 | 1 |

4. What are the values of the following expressions?

(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):True

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: **Equals to : == , Assignement : =**

**A=10, 10 is assigned to a variable named ‘A’.**

**A==10 , here it tells that value in A is equals to 10.**

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:

spam = 0

**if spam == 10:**

**print('eggs') ------------------------------1**

**if spam > 5:**

**print('bacon')**

**else:**

**print('ham')------------------------------2**

**print('spam')**

**print('spam')---------------------------3**

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:

**spam=1**

**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?

Ctrl+c

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

-break statement is used to break a loop and pass control to next statement. While continue skips particular conditions.

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

Range(10): sequence 0 to 9

Range(0,10) : sequence 0 to 9

Range(0,10,1) : sequence 0 to 9 with difference of 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.

For i in range(1,11):

Print(i)

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?

Import spam

Spam.bacon()