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

**Answer : True and False**

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

**Answer : AND , OR and 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 ).

**Answer : T F AND Ans**

**1 0 0**

**0 1 0**

**1 1 1**

**0 0 0**

**T F OR Ans**

**1 0 1**

**0 1 1**

**1 1 1**

**0 0 0**

**NOT**

**0 1**

1. **0**

**T F NOR Ans**

**1 0 0**

**0 1 0**

**1 1 0**

**0 0 1**

**T F NAND Ans**

**1 0 1**

**0 1 1**

**1 1 0**

**0 0 1**

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) **Answer : False**

not (5 > 4) **Answer : False**

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

not ((5 > 4) or (3 == 5)) **Answer : False**

(True and True) and (True == False) **Answer : False**

(not False) or (not True) **Answer : True**

5. What are the six comparison operators?

**Answer : =,!=,>,>=,<,<=**

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

**Answer : equal to is used to check whether the value is equal to the value we want to compare with. Eg. If 5==5, if ‘pp’=’pp’. And Assignment operator is used assign a value to a variable.eg. a=5**

**B=’pp’,c=True**

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')

**Answer : 2 if blocks and else block**

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.

**Answer :**

spam='wew' #2

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?

**Answer : Ctrl + C**

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

**Answer : break will stop the current iteration and continue will skip the current iteration and move to next iteration**

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

**Answer :range(10) will take starting value as 0 and step value as 1. In range(0, 10), starting value is 0 and step value will be 1 by default. In range(0, 10, 1) starting value will be 0, step value will be 1. In all case end value will be 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.

**Answer :**

**for i in range(1,11):**

**print(i)**

**print('------------------------------')**

**i=1**

**while i < 11:**

**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?

**Answer : either using spam.bacon() or using alias**