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

@)**True & False, Both are used for relational & logical operators.**

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

**@)AND(1,1>>1),OR(0,1>>1) & NOT(0,0>>1)**

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 | O/P | AND | x | Y | O/P | OR | Y | O/P | NOT |
| 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 1 |
| 0 | 1 | 0 |  | 0 | 1 | 1 |  | 1 | 0 |
| 1 | 0 | 0 |  | 1 | 0 | 1 |
| 1 | 1 | 1 |  | 1 | 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)=**False**

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?

@)**<,<=,>,>=,==,!=**

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

@) **The “=” is an assignment operator is used to assign the value on the right to the variable on the left. The '==' operator checks whether the two given operands are equal or not. If so, it returns true. Otherwise, it returns false.**

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')

**@)ham,spam,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.

print("Enter spam number\n")  
spam = int(input())  
if spam == 1:  
 print('hello')  
if 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: Stop continuation of the loop in program.**

**Continue: It can stop the current block of execution & it cannot stop continuous loop execution**

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

**@) range(10):-continuous iterators. range(0, 10):-start & stop point here. range(0, 10,1):-start ,Stop & step**

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<11:  
 print(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.bacon()**