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

Ans:- Two Values of Boolean data type is True and False. Writen as True and False.

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

Ans:- and, or, not are three different types of Boolean operator.

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:-

|  |  |  |  |
| --- | --- | --- | --- |
| **Boolean Value** | **Operator** | **Boolean Value** | **Result** |
| 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 |
|  | not |  | False |
|  | not |  | True |
|  |  |  |  |

4. What are the values of the following expressions?

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

not (5 > 4)

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

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

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

(not False) or (not True)

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) 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:- Equal to(==) to operator comapres two values and gives result Boolean, and Assignment (=) operator assigns value to the variable, towards left side of the operator.

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') -----------------------🡪 1st block

if spam > 5:

print('bacon')

else:

print('ham') -----------------------🡪 2nd Block

print('spam')

print('spam') -----------------------🡪 3rd 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.

Ans:-

spam = int(input("Enter Spam Value"))

if spam == 1:

print('Hello')

elif spam == 2:

print('Howdy')

else:

print("Greatings!")

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

Ans:- Control plus C

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

Ans:- Break will move cursor out of the loop.

Continue will take cursor to 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:- range (10) will give the number from 0 to 9

range(0,10) will give same result as range(10), telling loop to start from 0

range (0,10,1) will alaso give same result as above two, telling loop to start from 0 and increment 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:-

**For loop:-**

for i in range(1,11):

print (i)

**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()