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

Ans: The two values of Boolean data type are True and False. We write them using T and F as capital and rest of the words in lowercase.

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

Ans: and, or and no.

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:

|  |  |  |  |
| --- | --- | --- | --- |
| 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 |
| True | Not | - | False |
| ­­- | Not | False | True |

4. What are the values of the following expressions?

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) : False

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: The difference between the equal to and assignment operators is that we use a single ‘=’ sign for assigning something and use double ‘==’ sign to compare values and obtain a Boolean result.

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: Following are the three blocks In the above code

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('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.

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: Ctrl+c

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

Ans: The break statement will move the execution outside and just after a loop. The continue statement will move the execution to the 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: They are all the same, The range(10) starts from 0 but does not include 10. The range(0,10) tells explicitly tells the loop to start at 0 and range(0,10,1) starts from 0 and explicitly tells the loop to take iterate variable 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:

1) for Loop:

for I in range (1 ,11):

print(i)

2) 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()