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

Ans. The values are ‘1’ & ‘0’. We write them as ‘True’ & ‘False’.

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

Ans. 1. ‘not’ unary negation

2. ‘and’ conditional And

3. ‘or’ conditional OR

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 ).

1. False + False = False
2. False + True = False
3. True + False = False
4. True + True = True

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) Ans. False

Not (5 > 4) Ans. False

(5 > 4) or (3 == 5) Ans. True

not ((5 > 4) or (3 == 5)) Ans. False

(True and True) and (True == False) Ans. False

(not False) or (not True) Ans. True

5. What are the six comparison operators?

Ans.

1. ==, equal to
2. !=, not equal to
3. >, less than
4. <, greater than
5. =< greater than equal to
6. >= less than equal to

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

Ans. for equal to we use 2 times the symbol “=” i.e. ==

And for assignment we use this symbol only once I,e. =

Like, a & b string is assigned in the way a = ‘Fahim’ & b = ‘Fahim’

As both the string is same we can say a == b

7. Identify the three blocks in this code:

spam = 0

if spam == 10: Block -1

print('eggs')

if spam > 5: Block - 2

print('bacon')

else:

print('ham') Block - 3

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.

spam = int(input(“please enter the what to store in spam: ”)

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. break

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

Ans. break is used for stopping the code to execute once the condition is reached whereas continue is asked to continue the code compilation once a condition is certified. Like:

For a in range(1,99):

Print(a)

If a<50:

break

elif a>50:

print(a)

continue

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

Ans.

1. range(10) shall be syntax error as it doesn’t have the opening value
2. range(0,10) mean range is having the value 0,1,2,…. Up to 9 as the last one is excluded
3. range(0,10,1) is having the values with +1 jump, like 0,1,2,….up to 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.

Ans.

for i in range(1,11):

print(i)

i=0

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.

class spam:

def bacon(self):

print(“bacon”)

p1 = spam()

p1.bacon()