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

Answer : True and False . True is 1 and False is 0

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

Answer : and , or, 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 :

And		
TRUE	TRUE	TRUE
TRUE	FALSE	FALSE
FALSE	TRUE	FALSE
FALSE	FALSE	FALSE

or		
TRUE	TRUE	TRUE
TRUE	FALSE	TRUE
FALSE	TRUE	TRUE
FALSE	FALSE	FALSE

not	
TRUE	FALSE
FALSE	TRUE

4. What are the values of the following expressions?

(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?

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:

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: # Block 3

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.

Answer-1:

```
spam = [1,2,3]

for i in range(len(spam)):
    if i==1:
        print ("Hello")
    elif i==2:
        print ("Howdy")
    else:
        print("Greetings")
```

Answer-2

```
spam = [1,2,3,"bot"]
Display = ["Hello", "Howdy", "Greetings"]

for i in range(len(spam)):
    if spam[i]==1:
        print (Display[i])
    elif spam[i]==2:
        print (Display[i])
    else:
        print("Greetings")
```

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

Answer : Stop in Jupyter Notebook or CTRL + C

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

A break statement terminates the loop when specified condition is met.
The continue statement skip the remaining code in a loop for running iteration.

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

Answer : Everything gives the same output,

range (10) = 0,1,2,3,4,5,6,7,8,9 (from 0 to 9) total 10

range (0,10) = from 0 to 10 (start, stop)

range (0,10,1) = (start, start , step=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.

Answer :

for x in range(1,11,1):

   print(x)

While loop

x =1

while x <= 10:

   print(x)

   x += 1

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

Answer : spam.bacon()