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

**ANSWER:** The two values of the Boolean datatype are True and False.

For example,

a = True

b = False

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

**ANSWER:** The three different types of boolean operators are AND, OR and 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 evaluates ).**

**ANSWER:**

**AND:**

a b a and b

False False False

False True False

True False False

True True True

**OR:**

a b a or b

False False False

False True True

True False True

True True True

**NOT:**

a not a

False True

True False

**4. What are the values of the following expressions?**

**ANSWER:**

(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:** ‘=’ operator is used to assign values. ‘==’ is used to check equality between two values.

**FOR EXAMPLE:**

‘=’ operator :

a = 0

b = a //b = 0

‘==’ operator:

a = 0

b = 0

a == b // True

**7. Identify the three blocks in this code:**

**ANSWER:**

spam = 0

if spam == 10:

print('eggs') # indent increased, block A

if spam > 5: # still block A

print('bacon') # still block A, indent increased, block B inside block A

else: # still block A, indent decreased, block B ended in line above

print('ham') # still block A, indent increased, block C inside block A

print('spam') # still block A, indent decreased, block C ended in line above

print('spam') # indent decreased, block A ended in line above

**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.**

spam = int(input())

if spam == 1:

print('Hello')

elif spam == 2:

print('Howdy')

else:

print('Greetings!')

9.If your program is stuck in an endless loop, what keys will you press?

**ANSWER:** CTRL + C

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

**ANSWER:** Break is used to terminate the loop and return whereas continue is used to skip or pass a single interaction in a loop, after which the loop continues to run till the end.

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

**ANSWER:**

range(10) : will run for values till 9.

range(0,10) : will run for values from starting point i.e 0 to ending point i.e 9.

range(0,10,1): will run the value from 0 to 9 but will increment 1 on each iteration.

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 i in range(1,11):**

**print(i)**

**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?

from spam import bacon