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

> ➢ The two possible values of Boolean data type are true and false.
> ➢ Syntax – True, False.

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

> ➢ 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 evaluates).

> ➢ 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 True - False.
>
> not False - True.

4. What are the values of the following expressions?

   i.   (5 > 4) and (3 == 5)
- ➢ False

  ii.   not (5 > 4)
- ➢ False

 iii.   (5 > 4) or (3 == 5)
- ➢ True

 iv.   not ((5 > 4) or (3 == 5))
- ➢ False

  v.   (True and True) and (True == False)
- ➢ False

 vi.   (not False) or (not True)
- ➢ True

5. What are the six comparison operators?

- ➢ == ,!= , > , < , >= ,<=

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

- ➢ Equal to operator (==) is used to check if two values are equal or not giving true or false as output.
- ➢ Assignment operator (=) is used to store a value in a variable.

7. Identify the three blocks in this code:

➢ spam = 0

(1st block) if spam == 10:

    print('eggs')

(2nd block) if spam > 5:

    print('bacon')

(3rd block) 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.

➢ 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?

➢ Ctrl + C

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

➢ Break statement will stop the execution of enclosing loop
➢ Continue statement skips the rest of loop and executes the next iteration.

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

➢ The output for all three will be the same.
➢ range (10) will give numbers from 0 to 9.
➢ range (0,10) is specifically instructing to start from 0.
➢ range (0,10,1) is specifically instructing to start from 0 and gibe number till 9 with a interval of 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.

➢ for i in range (1,11):

    print(i)

➢ i=1

  while i<=10:

    print(i)

    i += 1

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

➢ spam.bacon()