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

Boolean dtype values are – True , False

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

Operators – 1. And, 2. Or, 3. 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 ).**

True Or False : True, False or True : True, True or True : True, False or False: False ,

True and False : False, False and True : False, True and True : True, False and False: False ,

not True : False, not False: True

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

**(5 > 4) and (3 == 5) –** True and False 🡪 False

**not (5 > 4) -** not True 🡪 False

**(5 > 4) or (3 == 5) –** True or False 🡪 True

**not ((5 > 4) or (3 == 5)) –** not True or False 🡪 False

**(True and True) and (True == False) –** True and False 🡪 False

**(not False) or (not True) –** True or False 🡪 True

**5. What are the six comparison operators?**

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 for comparison whereas assignment operators are used to assign any variable, i.e they both does very different roles, for example

A = 4, here A is assigned as 4, its value if 4

Where as A == 4, means it is checking where value of A is equal to 4 or not, will give answer in True or False

**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')**

Three blocks are separated by indentation

1st block -   
spam = 0

if spam == 10:

print('eggs')

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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(‘Greeting’)

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

‘Ctrl + C’ in Command Prompt or PowerShell.

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

Break statement 🡪 break statement breaks or exits the loop immediately and continue with next line of code after the loop

Continue statement 🡪 continue statement skips or exits the current iteration of that loop and start with next iteration

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

All three will give the same output, it provide sequence of values starting from 0, to all the way to 9 and wont include 10

**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 = 0

while i < 11:

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?**

spam.bacon()