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

Ans: The Boolean types are “True” and “False”, and I will write as True False

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

Ans: 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 ).

Ans:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **A** | **B** | **A and B** | **A or B** |  | **C** | **not C** |
| True | True | True | True | True | False |
| True | False | False | True | False | True |
| False | True | False | True |  |  |
| False | False | False | False |  |  |

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. **<**
2. **<=**
3. **>**
4. **>=**
5. **==**
6. **!=**

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

Ans: Equal to operator is to verify the condition whether the A and B are equal or not (Here we use ==), whereas the assignment operator assigns a value to a variable (Here we use =)

Graphical user interface, text, application

Description automatically generated Assignment operator

Equal to operator

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

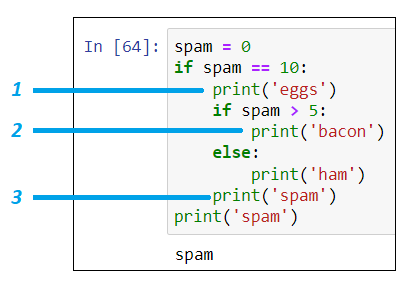
else:

print('ham')

print('spam')

print('spam')

Ans:



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.

Text

Description automatically generated Text

Description automatically generated Text

Description automatically generated

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

Ans: Restart Kernel (Esc+0+0)

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

Ans:

Break- It will break the conditional loop and stop it will not go to next statement/loop

Continue- It will skip for that particular condition in the loop and executes remaining loops as well.

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

Ans: All the 3 statements are same

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(10):

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:

spam.bacon()