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

True

False

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

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 evaluate ).

AND OR

|  |  |  |
| --- | --- | --- |
| 0 | 0 | 0 |
| 1 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 1 | 1 |

|  |  |  |
| --- | --- | --- |
| 0 | 0 | 0 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 1 | 1 |

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?

less than, greater than, less than or equal to, greater than or equal to, equal equal to and not equal to

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

The “=” is an assignment operator is used to assign the value on the right to the variable on the left. The '==' operator checks whether the two given operands are equal or not.

For eg: A= 58, here assignment

A==58, here equal to

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')

the three blocks in this code are,

ham

spam

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.

spam=int(input('enter value of 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?

Control+alt+delete and then click task manager and close the jupyter notebook forcefully.

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

The Break keyword terminates the execution of the current loop and passes the control over the next loop or main body, whereas when continue keyword is encountered, it skips the current iteration and executes the very next iteration in the loop.

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

All the values are same whether it is range(10), range(0, 10), or range(0, 10, 1) and the values are 0,1,2,3,4,5,6,7,8,9

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 LOOP

for i in range(1,11):

print(i)

WHILE LOOP

i=0

while i<=9:

i=i+1

print(i)

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

spam. bacon()