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
* 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 ).

|  |  |  |
| --- | --- | --- |
| A | B | Y=AB |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

|  |  |  |
| --- | --- | --- |
| A | B | Y=A+B |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

|  |  |
| --- | --- |
| A | Y = NOT A |
| 0 | 1 |
| 1 | 0 |

Where 0: False

1: True

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) : Flase

not (5 > 4) : Flase

(5 > 4) or (3 == 5) :True

not ((5 > 4) or (3 == 5)) : False

(True and True) and (True == False) : Flase

(not False) or (not True) : True

5. What are the six comparison operators?

* == Equal to
* != not equal to
* > grater than
* < less than
* >= greater than or eual to
* <= less than or 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.

Assignment operator is ‘=’ : we will use this when we want to assign value to a variable

Equal to is ‘==’ : we use this to compare the given 2 variables or data to know whether they are equal or not

7. Identify the three blocks in this code:

#Block 1, the value assigning

spam = 0

#Block 2 , if block

if spam == 10:

print('eggs')

#Block 3, if else block

if spam > 5:

print('bacon')

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.

spam =int( input(‘enter spam value’))

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?

* In jupyter notbook, ‘i,i’ is key the keyboard interruption

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

* break is end the loop and come out of the group
* continue ends the particular iteration and still continuous with in the same loop from it’s next iteration

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

* There is no difference in the above 3 loops

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)

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

Import spam

spam.bacon()

or

from spam import \*

bacon()