Assignment \_2

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

The two Boolean values in python are:

1. true

2. false

This can also written in numbers 1 as true and 0 as false.

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

The three types of Boolean operators are:

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 ).

AND truth table:

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **C** |
| **1** | **1** | **1** |
| **1** | **0** | **0** |
| **0** | **1** | **0** |
| **0** | **0** | **0** |

OR truth table:

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **C** |
| **1** | **1** | **1** |
| **1** | **0** | **1** |
| **0** | **1** | **1** |
| **0** | **0** | **0** |

NOT truth table:

|  |  |
| --- | --- |
| **A** | **B** |
| **1** | **0** |
| **0** | **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?

1.>(greater than)

2.<(less than)

3.=(equal)

4.>=(greater than or equal)

5.<=(less than or equal)

6.!=(not equal)

6. How do you tell the difference between the equal to and assignment operators?Describe a

condition and when you would use one.

Equal operator:

The Equal denoted as ‘==’. This is used to compare with two variables or values.

Eg: a==b,5==5,4==5

Assignment operator:

The Assignment operator is used to assign any value to the variable. It is denoted as ‘=’.

Eg:a=5,b=4

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

  print("eggs")🡪First Block

if spam > 5:

  print("bacon")🡪 Second Block

else:

  print("ham")-🡪

  print("spam”) -🡪 Third Block

  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())

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:

The break keyword terminates the loop and passes over the control over the next loop.

Continue:

The continue keyword skips the current iteration and executes the vary 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)?

Range(start,stop,step)🡪syntax

Range(10): 🡪range(stop)

The iteration will happen from 0 to 9.

Range(0,10):🡪range(start,stop)

The iteration will start at 0 and end at 9.

Range(0,10,1):range(start,stop,step)

The steps by 1. Start at 0 and end before 10 and steps by 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 loop:

  for i in range(1,11):

   print(i)

While loop:

i = 1

While i < 11:

print(i)

i++

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

importing spam?

It can be called with spam.bacon()