**ASIGNMENT - 2**

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

Ans- The two values of the Boolean data type are True and False.Always start first letter with upper case and rest of them write with lowercase.

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

Ans-and,or and not.

3. Make a list of each Boolean operators truth tables (i.e. every possible combination of Boolean

values for the operator and what it evaluate ).

Ans-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **condition 1**  **(e.g., X)** | **condition 2**  **(e.g., Y)** | **NOT X**  **( ~ X )** | **X AND Y**  **( X && Y )** | **X OR Y**  **( X || Y )** |
| false | false | true | false | false |
| false | true | true | false | true |
| true | false | false | false | true |
| true | true | false | true | true |

4. What are the values of the following expressions?

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

not (5 > 4)

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

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

(True and True) and (True == False)

(not False) or (not True)

Ans-False

False

True

False

False

True

5. What are the six comparison operators?

Ans-The six comparison operators are-

Less than(<), Greater than(>), Less than or equal to(<=), Greater than or equal to(>=), 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.

Ans-Assingment operators= Equal to operators==

|  |  |
| --- | --- |
| It is an assignment operator. | It is a relational or comparison operator. |
| It is used for assigning the value to a variable. | It is used for comparing two values. It returns 1 if both the values are equal otherwise returns 0. |
| Constant term cannot be placed on left hand side.  Example: 1=x; is invalid. | Constant term can be placed in the left hand side.  Example: 1==1 is valid and returns 1. |

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-The three blocks are everything inside the if statement and the lines print (‘bacon’) and print(‘ham’)

print(‘egg’)

If spam> 5:

print(‘bacon’)

else:

print(‘ham’)

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.

Ans-The code

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 will you press?

Ans-Press CTRL-C.

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

Ans-**Break** mainly used to terminate the enclosing loop such as while, do-while, for or switch statement wherever **break** is declared. **Continue** statement mainly skip the rest of loop wherever **continue** is declared and execute the next iteration.

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

Ans-.The range(10) call ranges from 0 upto 10,range(0,10) explicitly tells the loop to start at 0,and range (0,10,1)explicity tells the loop to increase the variables by 1 on each iteration.

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.The code:

For i in range(1,11):

print(i)

and:

i=1

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().