**ASSIGNMENT-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 ,FALSE.

The TRUE value can be used in the given statements using ‘True’keyword.

The FALSE value can be used in the given statements using ‘False’keyword.

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

Ans:-

The three different types of Boolean operators are given below:

AND operator:-

* It is the one of the boolean operator.
* It is used between two statements or condition and it gives true value if both the statements or conditions are true,else it will return false.

OR operator:-

* It is the one of the boolean operator.
* It is used between two statements or condition and it gives true value if anyone of the statements or conditions are true,else it will return false.

NOT operator:

* It is the one of the logical boolean operator.
* This compliments the variables current boolean value.That is ,if the boolean value is true then it will turns it into false.In python,it is represented using ‘not’ keyword.

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 ).

Ans:-

| P | Q | AND | OR | NOT(P) |
| --- | --- | --- | --- | --- |
| F | F | F | F | T |
| T | F | F | T | F |
| F | T | F | T | T |
| T | T | T | T | F |

4. What are the values of the following expressions?

Ans:-

(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?

Ans:-

In python,comparison operators also known as”relational operators”.

The six comparison operators are:-

1.Less than(<)

2.Greater than(>)

3.Less than or Equal to(<=)

4.Greater than or Equal to(>=)

5.Equal to(==)

6.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:-

equal to operator:-

It is represented as’==’.

By using this operator ,we will compare two values.

Example:-

if 5==5:

print(‘equal’)

Assignment operator:-

It is represented as ‘=”.

It is used for to assign one value to the variable.

Example:-

a=10

print(a)

7. Identify the three blocks in this code:

Ans:-

spam = 0

**#block 1 starts**

if spam == 10:

print('eggs')

**#block 2 starts**

if spam > 5:

print('bacon')

**#block 3 starts**

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.

Ans:-

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?

Ans:-

If our programme is stuck in an endless loop, the keys we will press is ‘ctrl+c’.

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

Ans:-

Break:-

The break keyword is used ,to stop the iteration in loops.

Continue:-

The continue keyword is used,to continue the iteration in loops.

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

range(10):-It will take the starting value from ‘0’.whatever the value we are giving it takes that as the end value.

Ex:-

for i in range(5):-

print(i,end=’’)

output:-0,1,2,3,4

range(0,10):-here,it will passing two values,in that it will takes first value as starting value for iteration and second value as end value for iteration.

Ex:-

for i in range(2,5):-

print(i,end=’’)

output:-2,3,4

range(0,10,1):-here,it will passing three values,in that it will takes first value as starting value for iteration and second value as end value for iteration and third value for steps.for example,after we starting the iteration for each iteration how many iteration we have to increment.

Ex:-

for i in range(1,10,2):-

print(i,end=’’)

output:-1,3,5,7,9.

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.

Ans:-

Program using for loop:-

for i in range(1,10+1):

print(i,end=’’)

Program using while loop:-

i=0

while(i<=10):

print(i,end=’’)

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()