

ASSIGNMENT - 2

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

:- There are only two values of the Boolean data type that is 'True' and 'False'. They are built-in data type which represents one of two values i.e. True or False. Generally it is used to represent truth values of Expression .

Ex. (1==1) is True but (2<1) is False

The first letter of Boolean data type must be Capital i.e. True and False

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

:- There are three types of Boolean operators.

(a) And (b) or (c) not

(a) And : - It checks the Boolean values of the variable and gives True if both the values are True.

X = True

Y = False

Then x and y gives False

(b) Or :- It gives True if any one of them are True or both of them are True.

X = True

Y = False

Then x and y gives True

(c) Not :- it gives True if x = False

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)

:- (a) False

(b) False

(c) True

(d) False

(e) False

(f) True

5. What are the six comparison operators?

| | | |
|---------------------------------|--|---------------|
| :- (a) == (equal to) | If both the operands are equals | a==b |
| (b) < (less than) | If one of the operands is less than other | 2<3 |
| (c) > (greater than) | if one of the operands is greater than other | 5>4 |
| (d) != (not equal to) | if operands are not equals | True != False |
| (e) <= (less than equals to) | | x <= y |
| (f) >= (greater than equals to) | | x>=y |

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

:-

Equal to (==) operator basically used for comparing the values of the operands while Assignment operator is used to assign any value to variable.

Ex.

A = 10

If (A == 20):

 print('Hello')

else:

 print('bye')

In the first row variable a assigned by the int value 10 while in second row it is comparing By 20.

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('Have a great day')
```

9. If your programme is stuck in an endless loop, what keys you'll press?

:- If programme is stuck in endless loop then we should apply break statement or we can use ctrl + c.

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

:-

(a) Break Statement – This statement is used to end smallest enclosing loop.

(b) Continue Statement – This statement is used to skip the rest of the loop statement and starts the next iteration of the loop to take place.

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

:- All the statements for range function are same.

Each range function returns the values from 0 to 9.

There is not any difference between them.

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.

:-

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For i in range(1,11):
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```
    Print(i)
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```
l = 1
```

```
While l<=10:
```

```
    Print(l)
```

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

:- We can call it just by writing spam.bacon()