1. What are the Boolean data type's two values? How do you go about writing them?

Ans. The two Boolean data types are “True” and “False”. Bool data type check whether condition is True or False.

A = True

B = False

Type(A)

Bool

Type(B)

Bool

Or

Type(True)

Bool

Or

X = 10

x = 2

if x == 2:

print("x is a prime no.")

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

Ans. Three different types of Boolean operators are – “or”, “and”, “not”/

x = 2

y = 3

z = 1

print((x<y) and (y<z))

print((x>y) or (x>z))

print(not(y<z))

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.

|  |  |  |
| --- | --- | --- |
| A | B | A and B |
| True | True | True |
| True | False | False |
| False | True | False |
| False | False | False |
|  |  | A or B |
| True | True | True |
| True | False | True |
| False | True | True |
| False | False | False |
|  |  |  |
| not |  |  |
| not (False) | True |  |
| not (True) | False |  |
|  |  |  |

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 different types of reference operators?

Ans.

1. Arithmetic operator ( + , - , / , \* , % , // )
2. Logical operator ( and , or , not )
3. Assignment operator ( = , +=, -=, \*= )
4. Comparison operator ( == , < , > , <= , >= , <> )
5. Membership operator ( in , not in)
6. Identify operator (is , is not)

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

Ans. Assignment is used to assign value to the variable. For ex. A = 10

Equal operator is used to check whether give value is equal or not. For ex. If a == b

7. Describe a condition and when you would use one.

Ans. Condition statements - If , elif, else

These statements will be used when I want to write a condition statement

a = int(input('Enter 1 number: '))

b = int(input('Enter 2 number: '))

if a > b :

print("a is greater than b {}".format(a))

else :

print("b is small")

8. Recognize the following three blocks in this code:

Ans.

spam = 0

if spam == 10:

print('eggs') Block A

if spam > 5:

print('bacon') Block B

else:

print('ham') Block C

print('spam')

print('spam')

9. Create a programme that prints. If 1 is stored in spam, prints Hello; if 2 is stored in spam, prints Howdy; and if 3 is stored in spam, prints Salutations! if there's something else in spam.

Ans.

spam = int(input("Enter a interger : "))

if spam == 1:

print("Hello")

elif spam == 2:

print("Howdy")

else :

print("Salutations")

10.If your programme is stuck in an endless loop, what keys can you press?

Ans. Ctrl + C

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

Ans. Break statement is used to exit the loop and will not proceed further.

But continue statement is used to skip the certain iteration in the loop.

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

Ans. There will no difference between range(10), range(0, 10), and range(0, 10, 1)

range(10) has one parameter but function will be same

range(0, 10) has two parameter but function will be same, if there is range (3,10), then it will act differently

range(0, 10, 1) has 3 parameter. Range 0-10 with jump 1, so the function will be same. If it is range(0,10,2) then it will act differently.

13. Using a for loop, write a short programme that prints the numbers 1 to 10 Then, using a while loop, create an identical programme that prints the numbers 1 to 10.

Ans.

a = range(1,11)

for i in a:

print(i)

1

2

3

4

5

6

7

8

9

10

a = 1

while (a<=10):

print(a)

a +=1

14. If you had a bacon() function within a spam module, what would you call it after importing spam?

Ans.