ASSIGNMENT - 2

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

Answer – Two values of Boolean data type are:

1. True
2. False

We can write 1 for True and 0 for False and may also write Tue,False.

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

Answer – 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 ).

Answer – Truth table :

A ***OR*** B

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **A+B** |
| TRUE(0) | TRUE(0) | TRUE(0) |
| TRUE(0) | FALSE(1) | TRUE(0) |
| FALSE(1) | FALSE(1) | FALSE(1) |
| FALSE(1) | TRUE(0) | TRUE(0) |

A ***AND*** B

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **AB** |
| TRUE(0) | TRUE(0) | TRUE(0) |
| TRUE(0) | FALSE(1) | FALSE(1) |
| FALSE(1) | FALSE(1) | FALSE(1) |
| FALSE(1) | TRUE(0) | FALSE(1) |

***NOT*** A

|  |  |
| --- | --- |
| A | A’ |
| TRUE(0) | FALSE(1) |
| FALSE(1) | TRUE(0) |

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)

ANSWER –

(5 > 4) and (3 == 5) : FALSE(0)

not (5 > 4) : FALSE(0)

(5 > 4) or (3 == 5) : TRUE(1)

not ((5 > 4) or (3 == 5)) : FALSE(0)

(True and True) and (True == False) : FALSE(0)

(not False) or (not True) : TRUE(0)

5. What are the six comparison operators?

ANSWER:

1. EQUAL - “==”
2. LESS THAN - “<”
3. GREATER THAN - “>”
4. NOT EQUAL TO - “!=”
5. LESS THAN EQUAL TO - “<=”
6. GREATER THAN 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.

ANSWER:

Answer : Equal to operator :==(compares whether both values are same or not)

Assignment operators: assign values to variables(x=2,y=3 where x assumes value 2 and y as 3 untill modified.

7. Identify the three blocks in this code:

Answer :

spam = 0 ( Value Assignment )

if spam == 10: ( If statement block )

print('eggs')

if spam > 5:

print('bacon')

else: (else block)

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.

Answer :

spam = int(input("Enter the value of spam"))

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?

Answer : We will press stop key or Cntl+C keys.

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

Answer :

Break is the inbuilt function which is used to stop or terminate the loop wherever it applies and continue statement on is used to skip the current code inside the loop where continue is applied and forces the next iteration of code will begin.

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

Answer:

All ranges are same with the start index 0 and last digit is 9 with 1 value interval.

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.

Answer : using for loop

for i in range (1,11) :

  print (i)

using while loop

i = 1

while i <11 :

  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?

Answer : spam. bacon()