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

Ans: Two Boolean types are True and False. Python gives error when true and false is written. True represents 1 and False represents 0

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

Ans: a) comparison operators b) Binary Boolean operator c) Not Operator

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 ).

|  |  |  |
| --- | --- | --- |
| Operand1 | Operand2 | And |
| True | True | True |
| True | False | False |
| False | True | False |
| False | False | False |

|  |  |  |
| --- | --- | --- |
| Operand1 | Operand2 | OR |
| True | True | True |
| True | False | True |
| False | True | True |
| False | False | False |

|  |  |
| --- | --- |
| Operand | Return Value |
| True | False |
| False | True |

4. What are the values of the following expressions?

(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?

>, <, == ,!=, <=,>=

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

The “=” is an assignment operator is used to assign the value on the right to the variable on the left.

Eg : a=10

The ‘==’ operator checks whether the two given operands are equal or not. If so, it returns true. Otherwise it returns false.

Eg:5==5

This will return true.

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')

o/p:

ham

spam

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.

spam = 1

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: Press cntrl+c to stop the infinite loop

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

The break statement will move the execution outside and just after a loop.

The continue statement will move the execution to the start of the loop

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

They all do the same thing. The range(10) call ranges from 0 up to (but not including) 10, range(0, 10) explicitly tells the loop to start at 0, and range(0, 10, 1) explicitly tells the loop to increase the variable 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.

For loop to print 1 to 10

for x in range(1,11):

print(x)

while loop to print 1 to 10

i=1

n=10

while i<=n:

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?

Spam.becon()