1.What are the two values of the Boolean data type? How do you write them?In a logic control structure we need to find the conditions in two states ,that is, TRUE or FALSE--boolean data type.We use relational and logical operators.

If(boolean values)

{//code to be executed till boolean value is true//}

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

Python has three Boolean operators, or logical operators: and , or , and 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 ).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| a | b | a && b | a || b | !a |
| true | true | true | true | false |
| true | false | false | true | false |
| false | true | false | true | true |
| false | false | 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?

Operator Name

== equal to

!= not equal to

< less than

<= less than or equal to

> greater than

>= greater than or 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.= is a assignment operator and == is a comparison operator. = operator is used to assign value to a variable and == operator is used to compare two variable or constants.For eg x=9 here we are assigning value 4 to Variable x

X==4 here we are checking whether x is equql to 4 or not

7. Identify the three blocks in this code:

spam = 0

if spam == 10:(block 1)

print('eggs')

if spam > 5:(block2)

print('bacon')

else:(block3)

print('ham')

print('spam')

print('spam')

output

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 = 0

if spam == 1:

print('hello')

if spam ==2:

print('howdy')

else:

print('greetings')

9.If your programme is stuck in an endless loop, what keys you’ll press?CTRL + C

10. How can you tell the difference between break and continue?when break keyword comes, it terminates the execution of the current loop and passes the control over the next loop or main body, whereas when continue keyword is encountered, it skips the current iteration and executes the very next iteration in the loop.

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?range(10):- generating sequence of 10 numbers

0

1

2

3

4

5

6

7

8

9

range(0,10):-(start value, stop index(no of values from start value))(output same as above)

range(0,10,1):-(start value, stop index, steps)(output same as above)

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 i in range(1,11):

print (i)

count=1

while count<=10:

print(count)

count +=1

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