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

Ans. Boolean data type has two values : 1. True and 2. False

We write them like : a=True,b=False

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

Ans. The logical operators and, or and not are also referred to as boolean operators.

Ex. a=50 b=25

a>40 and b>40 : False

a>40 or b>40 : True

Not(a>10): False

1. 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. AND : OR : Not:

A B A and B A B A or B A NOT(A)

True True True True True True True False

True False False True False True False True

False False False False False False

False True False False True True

4. What are the values of the following expressions?

(5 > 4) and (3 == 5)

Ans. False

not (5 > 4)

Ans. True

(5 > 4) or (3 == 5)

Ans. True

not ((5 > 4) or (3 == 5))

Ans. False

(True and True) and (True == False)

Ans. False

(not False) or (not True)

Ans. True

5.What are the six comparison operators?

Ans. == equal

!= not equal

>= greater than equal

<= less than equal

> greater than

< less than

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

Ans. Equal to operator is used for comparison like is a equal to b (a==b) whereas assignment operator is used for assign a value in variable like a=5.

For check if a have value 5 than equal to operator used:

If a==5:

Do;

For assign value 7 in b than assignment operator used:

B=7

7. Identify the three blocks in this code:

spam = 0

if spam == 10: # This is first block

print('eggs')

if spam > 5: # This is second block

print('bacon')

else: # This is third 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.

Ans. Spam=int(input(“enter a number”))

if spam == 1: # This is first block

print('Hello')

if spam ==2: # This is second block

print('Howdy')

else: # This is third block

print('Greetings!')

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

Ans. Ctrl+c

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

Ans. Break Statement :

A break statement is used to terminate the loop whenever a particular condition is satisfied. The statement is there just next after the loop receives control of the program. The break statement will end the innermost loop if it is contained within a nested loop that is the loop inside the other loop. It is used to end the loop that it is enclosed in, such as a do-while, while, switch, and for statement.

for char in "Aditya":

if char == "t":

break

print(char)

print("Over")

Output:

A

d

i

Over

Continue Statement:

The continue statement skips the remaining lines of code, for the current iteration of the loop. In this case, the loop does not end, it continues with the next iteration.

for char in "Aditya":

if char == "t":

continue

print(char)

print("Over")

Output:

A

d

i

y

a

Over

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

Ans. There is no difference in output all of them. All have same output.

range(10): by default it start with 0 and end to 10 and gap 1 by default there is only end point given.

range(0,10): it start with 0 and end to 10 and gap 1 by default there is start and end point given

range(10): t it start with 0 and end to 10 there is start ,end and gap are given.

1. 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.

Ans. for i in range(1,11):

Print(i)

i=1

while i<11:

print(i)

i+=1

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

Ans. import spam

spam.bacon()