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

Ans. bool A = True

Bool B = False

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

Ans. AND operator , OR operator, 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 ).

Ans. AND Operator OR Operator NOT Operator

1,0,0 1,0,1 1,0

0,0,0 0,0,0 0,1

1,1,1 1,1,1

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)- True

(not False) or (not True)- True

5. What are the six comparison operators?

== equal

!- not equal

< less than

> greater than

<= less than or equal to

>= 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

Ans. Assignment operator "="

It is an assignment operator.

It is used for assigning the value to a variable.

example a = 10, str = "Bhanu"

Constant term cannot be placed on left hand side.

Example: 1=x; is invalid.

Equal to Operator "=="

It is a relational or comparison operator

It is used for comparing two values. It returns 1 if both the values are equal otherwise returns 0.

Constant term can be placed in the left hand side.

Example: 1==1 is valid and returns 1.

7. Identify the three blocks in this code:

Ans.

spam = 0 block 1

if spam == 10: block 2

print('eggs')

if spam > 5: block 3

print('bacon')

else:

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.

Ans.

spam=0

if spam==1:

print(‘Hello’)

if spam ==2:

print(‘Howdy’)

else:

print(‘Greentings!’)

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

Ans. Ctrl-C

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

Ans. break – when a compiler encounters break keyword in a loop, it exits from that loop.

for i in range(1,5) :

print(i)

if(i==3):

break

output- 1 2 3

continue- when compiler encounters continue keyword in a loop , it continues to next iteration.

for i in range(1,5) :

print(i)

if(i==3):

continue

output- 1 2 3

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

Ans. All 3 are same , it will run from 0 to 10(excl 10) with a default increment of 1.

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.

Ans. For loop -

for i in range(1,11):

print(i)

while loop –

n=1

while(n<11):

print(n)

n=n+1

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

Ans. spam.bacon()