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

#Two boolean data type

#1.True

#2.False

a = True + True

print(a)

b = False - True

print(b)

result 2

-1

while True:

if True:

print("True or False")

break;

print(0==1)

result:

True or False

False

print(1==1)

True

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

We have 3 types of boolean operators.. which are And, or and not...

#1.And both condtions have to be correct

True and True

#2.Or any one of them is true it will return 1 or true

True or False

#3.not its like negative operator

a=5

a is not a

b = 10

b is not a

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 ).







4. What are the values of the following expressions?

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

#because 5>4 return True and returns False

#1 and 0

result - False

not (5 > 4)

result - #5>4 will return True but not will change it into not True return False

(5 > 4) or (3 == 5) will retun True

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

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

(not False) or (not True) True

result -

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

#5>4 will return True

#and (3==5) False

#True or False

result - True

5. What are the six comparison operators?

== equal to

<=less than equal to

>=greater than equal to

>greater than

<less than

!=not 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.

== checks if both value in right hand side and left hand side equal or not if they are it will return 1 if fails then 0

a = 2 b=2

a==2

and assignment operator = means value has been assigned

a = 2

that means variable a has value 2 stored in its place in ram.

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')

result-------

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

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.

def funct(a):

if a == 1:

print("spam")

elif a==2:

print("howdy")

else:

print("Greetings!")

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

ctrl and c

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

break stops the loop takes back to beginning it will stop if condition is true and come out of loop.

for i in range(1,10):

if i==2:

break

print(i)

loop will stop at if i==2 it will skip that part and continue again

continue will keep running the loop but skips if condition is correct

#break will stop the execution in the loop

#continue will skip and give control to the loop

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

all are same in range(10) it will start from 0 and each time it will add+1

range(0, 10) it tells to start from 0 explicitly and increment will same as above

range(0, 10, 1) it tells start from 0 and go till 10 and add each time 1 so this loop will run til 9

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(10):

print(i)

start = 0

while True:

if start>=10:

break

start=start+1

print(start, end=" ")

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

def spam():

def bacon():

print("inside bacon")

bacon()

to call the function

spam()