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

Ans: 1.TRUE 2. FALSE

Example : 1==1 is True whereas 2<1 is False.

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

Ans. (i) AND

(ii) OR

(iv) 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 ).

ANS:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | B | A or B | A and B | NOT A | NOT B |
| True | True | True | True | False | False |
| False | True | True | False | True | False |
| True | False | True | False | False | True |
| False | False | False | False | True | True |

As we show in above table , OR operation act like add(0,1), AND operation Act like Multyply(0,1) , NOT give its opposite value (0,1).

4. What are the values of the following expressions?

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

not (5 > 4)

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

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

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

(not False) or (not True)

ANS:

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

not (5 > 4) gives FALSE

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

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

(True and True) and (True == False) gives FALSE

(not False) or (not True) gives TRUE

5. What are the six comparison operators?

Ans: 1. + , 2. - , 3. = , 4.\* 5. / , 6. <>

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

ANS:

A=5

if A ==5:

print("true")

Here , in above program by single use of equal operator (i.e. =) we assign value so here it is a assignment operator , Whereas in if condition we use double equal operator (i.e. ==) that means actual compare the value according to given condition and act like comparing operator.

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')

ANS:

1st block is : if spam == 10:

print('eggs')

2nd block is :

if spam > 5:

print('bacon')

3rd block is :

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.

ANS:

spam=int(input())

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: STOP

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

ANS: . Break statement mainly used to terminate the enclosing loop such as while, do-while, for or switch statement wherever break is declared And Continue statement mainly skip the rest of loop wherever continue is declared and execute the next iteration.

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

ANS: here according to syntax meaning are same of all three ranges .

No difference the meaning , all are same and result also same .

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 i in range(11):

print(i)

and

a=0

while a<=9:

a=a+1

print(a)

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

ANS:

Here below define function:

def bacon(s):

for i in range(s):

print(i)

import spam