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

Ans: TRUE, FALSE

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

Ans: and, or, 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** | **not A** |
| TRUE | FALSE |
| FALSE | TRUE |
| **A** | **B** | **A and B** |
| TRUE | TRUE | TRUE |
| FALSE | TRUE | FALSE |
| TRUE | FALSE | FALSE |
| FALSE | FALSE | FALSE |

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **A or B** |
| TRUE | TRUE | TRUE |
| FALSE | TRUE | TRUE |
| TRUE | FALSE | TRUE |
| FALSE | FALSE | FALSE |

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?

Ans: <, >, ==, <=, >=, !=

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

Ans: While assigning value to variable we use ‘=’. While comparing value we use ‘==’ .

Example:- a= 10(value assigning to a)

b= 10(value assigning to b)

a == b(comparing)

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:

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:

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: Ctrl + C

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

Ans: Break will stop the loop if condition does not match. Continue will skip the particular index and move to next index if condition does not match.

Example:

###BREAK###

for i in range(10):

if i == 3:

print(i,"it's going to break the loop")

break

else:

print(i)

###continue###

for i in range(10):

if i == 3:

print(i,"it's going to skip")

continue

else:

print(i,end=',')

output: 0,1,2,3 it's going to skip

4,5,6,7,8,9,

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

Ans: range(10) ,range(0,10) and range(0, 10, 1) all are same.

In python default starting range is 0. And default step is 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(1,10+1):

print(i,end=',')

###while loop###

i=1

while i<10+1 :

print(i,end=',')

i+=1

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

Ans: from spam import bacon

Or

From spam import \*