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

Ans: Boolean can have two values true and false. These can be written as True and False.

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

Ans:

== equal to

!= not equal to

<= Less than or equal to

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 ).

|  |  |  |
| --- | --- | --- |
| name == Rohit | age>25 | has arms? |
| TRUE | TRUE | TRUE |
| TRUE | FALSE | FALSE |
| FALSE | TRUE | FALSE |
| 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:

|  |  |
| --- | --- |
| Operator | Name |
| == | equal to |
| != | Not equal to |
| > | greater than |
| >= | greater than or equal to |
| < | less than |
| <= | less 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:

Equal to should be written as ==

And assignment operator is =

For comparison : if age >= 5 then ‘child’

A=10

7. Identify the three blocks in this code:

spam = 0

Block 1

if spam == 10:

Block 2

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

Block 3

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 = 2

if spam==1:

print('Hello')

elif spam==2:

print('SPam')

else:

print('Greeting')

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

Ans: Interrupt the kernel

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

Ans: Break is used to stop the iteration and exit from loop.

Continue is used to continue with next iteration.

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

Ans: They all will produce same result it is just a writing them differently syntactically.

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:

i = 1

while i <=10:

print(i)

i +=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()