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

Answer – Boolean data type only consist 0 and 1. Ture , Flase

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

Answer- 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 ).

Answer-

|  |  |  |  |
| --- | --- | --- | --- |
| 0 | 0 | AND | 0 |
| 0 | 1 | AND | 0 |
| 1 | 1 | AND | 1 |
| 0 | 0 | OR | 0 |
| 0 | 1 | OR | 1 |
| 1 | 1 | OR | 1 |
| 0 |  | NOT | 1 |
| 1 |  | NOT | 0 |

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?

Answer - ==, <, <=, >, >=, !=

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

Answer- Equal to operator user double == and assignment operator use single =. Assignment operator used with if, elif condition and while loop condition.

Ex- if a == 4 (check the value of a to 4 )

a = 4 (assign 4 to a)

7. Identify the three blocks in this code:

spam = 0

**1st block** - if spam == 10:

print('eggs')

**2nd block**- if spam > 5:

print('bacon')

**3rd block -** 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.

Answer-

spam = int(input())

if spam == 1:

print(“Hello”)

elif spam ==2

print(“Howdy”)

else:

print(“Greeting”)

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

Answer- Ctrl+C

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

Answer – break statement terminate the loop and exit the loop. Continue statement skip execution after the continues statement and continue to next iteration.

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

Answer- There are no difference, all are same with output 0123456789.

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.

Answer-

for i in range(1,11):

print(i)

##program using while loop########

a=0

while a < 10:

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?

Answer: spam.bacon()