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

True(1) & False(0)

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

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 ).

|  |  |  |
| --- | --- | --- |
| AND | | |
| True | True | True |
| True | False | False |
| False | True | False |
| False | False | False |
| OR | | |
| True | True | True |
| True | False | True |
| False | True | True |
| False | False | False |
| NOT | | |
| Not True | False |
| Not False | True |

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?

GreaterThan,Lessthan,Equals,Not Equals,GreaterThanOrEquals,LessThanOrEquals

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

Equals to will have two assignment operators(==)

Assigment operators have one equals to (=)

7. Identify the three blocks in this code:

spam = 0

if spam == 10:🡺 first block

print('eggs')

if spam > 5:🡺 second block

print('bacon')

else:🡺 third block

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.

spam = input(“please enter spam value ”)

If spam ==1:

Print(“Hello”)

If spam== 2:

Print(“Howdy”)

else:

print(“Greetings”)

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

Ctrl+c in windows

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

Break will exit the loop of which it was running, if it was inner loop it will exit the inner loopl

Continue will skip the current running loop

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

range(10) 🡺 since it doesn’t have lowerbound it will take 0 as lower bound and print from 0-9(default set size is 1)

range(0,10)🡺 since it was having lower and upper bound it will print from 0 to 9(default step size is 1)

range(0,10,1)🡺since it has explicitly mentioned lower,higher bound and stepsize as 1 it will print from 0-9 with step size as 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.

n=11

for i in range(1,n):

print(i)

i=1

while i < 11:

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?

Import spam

Spam.bacon()