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

-- Boolean data has two types True and False

-- a=True b=False

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

-- AND ,OR and 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

Input Input Output

1 1 1

1 0 0

0 1 0

0 0 0

-- OR

Input Input Output

1 1 1

1 0 1

0 1 1

0 0 0

-- NOT

Input Output

0 1

1 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?

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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.

-- Equal to operation checks if the 2 expressions are equal or not

e.g. 5==6(is 5 equal to 6?)

-- Assignment operator is used to assign a value

e.g. num=5(num variable has a assigned to it as 5)

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs') # indent increased, block A

if spam > 5: # still block A

print('bacon') # still block A, indent increased, block B inside block A

else: # still block A, indent decreased, block B ended in line above

print('ham') # still block A, indent increased, block C inside block A

print('spam') # still block A, indent decreased, block C ended in line above

print('spam') # indent decreased, block A ended in line above

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= int(input(“enter a num”)

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? – Ctlr + C

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

-- if a loop encounters with break statement, then the loop will stop

-- if a loop encounters with continue statement then the loop will skip the process only for that on step and move on to the next iteration.

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

-- range(10) – it will automatically take 0 as a starting point and at 10 exclusive and increment by 1

--range(0,10) – here start and end point is given and increment by 1

--range(0,10,1) – starts at 0 ends at 10 exclusive and the increment is also given that 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.

-- for i in range(1,11):

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?

This function can be called with spam.bacon().