Assignment 2

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

Answer True and False

gender , (Male , Female)

Medical\_stutus ,( normal , abnormal )

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

Answer AND , OR , NOT

3 ) Make a list of each Boolean operators truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluate ).

Answer : for AND operator

TRUE AND TRUE TRUE

TRUE AND FALSE FALSE

FLASE AND FALSE FALSE

FOR OR

TRUE OR TRUE TRUE

TRUE OR FALSE TRUE

FALSE OR FALSE TRUE

FOR NOT (ITS REVERSE)

TRUE NOT IS FALSE

FALSE NOT IS TRUE

4 ) What are the values of the following expressions?

I ) (5 > 4) and (3 == 5)

II) not (5 > 4)

III) (5 > 4) or (3 == 5)

IV) not ((5 > 4) or (3 == 5))

V) (True and True) and (True == False)

VI) (not False) or (not True)

**ANSWER:**  FOR I) FALSE

FOR II) FALSE

FOR III) TRUE

FOR IV) FALSE

FOR V) FALSE

FOR VI) TRUE

5) What are the six comparison operators?

1 )Less than(<)

2) greater than(>)

3) less than or equal to (<=)

4) greater than or equal to (>=)

5) equal to(==)

6) not equal to (!=)

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

Answer : suppose we have datasets and we want to take that row only where the gender are “male”

We ll write

df[df[“gender”]==”male”]

in assignment operator

its used for the assign the value a=1 , constant term cant be placed at left side

7) 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”)

answer **This a 1st block** spam = 0 ,

**This 2nd block** if spam == 10:

print(“eggs”)

**This 3rd block** if spam > 5:

print(“bacon”)

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.

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?

Answer : we can use (CTRL+C)

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

Answer: Break stops entire process of the loop. Continue statement only stops the current iteration of the loop.

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

range(0, 10, 1)?

**Answer**: **range(10)** will print a 10 number starting from 0 to 9

**range(0,10)** will print a number starting from 0 till 10-1 means just before 10

**range(0, 10, 1)** will print a number starting from 0 till 10-1 and it will take a jump of only 1

if there is range(0,20,2) , it will print a number starting 0 and before 20 and will take a jump of 2 like 0,2,4,6,8

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** **Using for loop**

For i in range(1,10+1):

Print(i)

**Using while loop**

I=1

While i<=10;

Print(i)

I=i+1

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

Answer spam.bacon()