**FULL STACK DATA SCIENCE**

**ASSIGNMENT-1**

1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

\*

'hello'

-87.8

-

/

6

A) \* 🡪 Expression

‘hello’ 🡪 Value

-87.8 🡪 Value

- 🡪 Expression

/ 🡪 Expression

+ 🡪 Expression

6 🡪 Value

2. What is the difference between string and variable?

A) String 🡪 The string is used to store the information in the form of text.

Ex. “hello” , ‘world’, ”54”

Variable 🡪 The variable is something that stores data in the form of container. It can store different types of data types.

Ex. Int , float , char etc…

3. Describe three different data types.

A) Integer (int) 🡪 It will store only numerical values Ex. A=6 , b=8

Float (float) 🡪 It will store decimal(Floating) type values Ex. 45.31,65.54

Dictionary(dict) 🡪 It is the collection which is ordered , changeable and do not allow duplicates. It is used to store data values In key:value pairs.

Ex . dict1={“brand”:”Mercedes Benz”,”model”:”Mustang”,”year”:1978}

4. What is an expression made up of? What do all expressions do?

A) An expression is made up of variables, operators which are constructed according to the syntax of the language, that evaluates to a single value.

Ex. Value = 7\*5+2 🡪 This will calculate the value according to the precedence of operators and produce output.

5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

A) An expression is made up of variables, operators and the statement represent an action or command eg. Print statement

6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

A) After the execution of the above statement the value of bacon will become “23”

Graphical user interface, application

Description automatically generated

7. What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' \* 3

Table

Description automatically generated with medium confidence

8. Why is eggs a valid variable name while 100 is invalid?

A) . Because integer should not be given as variable name. we can use integers after the letters. Ex. egg100, gg23,e78

9. What three functions can be used to get the integer, floating-point number, or string version of a value?

A) int() , float() , str()

10. Why does this expression cause an error? How can you fix it?

'I have eaten ' + 99 + ' burritos.'

A) We cannot add(concatenate) integers to the string . If we add then we can do typecasting .