**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.**

1. \* --- expression
2. 'hello' --- Value
3. -87.8 --- value
4. - --- expression
5. / --- expression
6. + --- expression
7. 6 --- Value

**2. What is the difference between string and variable?**

**String** : A string is data type used in any programming which can be an integer and floating point unit. One can use to represent text rather than numbers

Eg : “ Hello World”, “1234”

**Variable:** A Python variable is a reserved memory location to store values. One can store data required for computer processing at any given point using variable

Eg: X = 10, data = [1,2,3,4] where x and data forms the variable

**3. Describe three different data types.**

Numeric Data Type : This data type consist of any values related to numbers which can be either positive or negative. The three data types are

Integer (int), float (float) and string (str)

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

Expression are the ones which always returns a value. Expression is a combination of variables, operations and values that yields a result value. Expressions assist in evaluating things

Eg: “Hello” + “Mumbai” or 10 +12

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

A statement does something. Statements represent an action or command

e.g printing a statement, assigning statement “Hi” or x = a

Expression returns a value, but statement doesn’t return any value it just use to print something

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

bacon = 22

bacon + 1

**Ans : Bacon = 23**, the variable is iterated by 1 as per the given condition.

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

* 'spam' + 'spamspam' - 'spamspamspam'

Concatenates two words using + operator

* 'spam' \* 3 - spamspamspam

Multiplication of string by the numbers mentioned

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

Variable name cannot be a number. Hence eggs forma valid variable than 100.

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

* Integer is int()
* Float is float()
* String is str()

10. Why does this expression cause an error? How can you fix it? 'I have eaten ' + 99 + ' burritos.'

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

Out[5]:'I have eaten 99 burritos.'

Use 99 in double quotes to convert it in string as concatenation are done only of strings and not numeric characters