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

**Ans.**

* **Values :-** ‘hello’, -87.8, 6
* **Expression :-** -, / ,+

2. What is the difference between string and variable?

**String:-** String data type can be alphabetical, numerical, float or alphanumeric etc. String values we mention with or under single, double or triple quotations. like: “Sumit”

**Variable:-** Variable is a name we assign to a particular value.

3. Describe three different data types.

**Integer:-** Integer type data are numerical values. We don’t use any quotations with this.

**String:-** String data type can be alphabetical, numerical, float or alphanumeric etc. String values we mention with or under single, double or triple quotations. like: “Sumit”

**Float:** Float are similar as numerical data but this consist Decimal values too. Like: 873.46

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

**Ans**. An expression is made up of one or more variables, operators, and function. It represents a computation or a value in a programming language.

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

**Ans.**

**Expression:-** Expression made up of variables, operators and functions and produce or show values when executed or evaluated. Like in spam=10, 10 is an expression.

**Statement:** Statement is a complete task and instruction that performs a specific task. Like entire spam=10 is statement

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

bacon = 22

bacon + 1

**Ans.** 23

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

'spam' + 'spamspam'

'spam' \* 3

Ans. For both output will be same:- spamspamspam

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

**Ans.** This is a inbuilt rule of python that a numerical value can’t be Variable.

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

**Ans.** int(), float(), str()

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

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

**Ans.** Here we have 99 as integer and all other are string and we can’t do addition operation between String and Integer. We need to close 99 with quotations to remove error.

Like: 'I have eaten ' + ‘99’ + ' burritos.'