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.

\* **Expression**

'hello' **Value**

-87.8 **Value**

- **Expression**

/ **Expression**

* **Expression**

6 **Value**

2. What is the difference between string and variable?

**Ans:- String is a data type of a variable that defines the type of data we can store in a particular variable. Variable, however, is the user defined memory unit that has the ability to store some values in it in text form.**

3. Describe three different data types.

**Ans:- Integers – For storing value in numerical form**

**Floating point numbers – For storing values in decimal form.**

**String – For storing values in textual form.**

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

**Ans:- Expressions are made up variables, operators, and literals. Expressions return some value.**

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

**Ans: - A statement in itself is a complete instruction. However, multiple expressions together make a statement. Example – 5+5 is an expression. Statement would have been something like print(5+5).**

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

bacon = 22

bacon + 1

**Ans:- bacon will contain 22 as the expression doesn’t assign bacon+1 to bacon itself.**

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

'spam' + 'spamspam' **= spamspamspam**

'spam' \* 3 **= spamspamspam**

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

**Ans:- Because 100 is a literal and can’t be treated as a variable. Also, variable naming conventions need to be followed as it restricts us to have a variable name starting with a digit.**

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

**Ans:- int(‘1’) -🡪 this would turn string 1 into integer 1**

**float(‘1) -🡪 this would turn string 1 into floating 1.0**

**str(1) -🡪 this would turn integer 1 into string 1**

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

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

**Ans:- 99 is an integer here. In order to get this running we need to convert type of 99 into string by type the below code**

**‘I have eaten ‘ + str(99) + ‘ burritos.’**

**Or**

**‘I have eaten ‘ + ‘99’ + ‘ burritos.’**