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 value which contains letters or numbers inside single quotes (eg. ‘world’, ‘10’) whereas variable is something that stores the value which can be either integer, string, float or Boolean, etc.*

3. Describe three different data types.

**Ans –**

*1] INTEGER – any number, positive or negative without decimals is considered as an integer data type*

*2] STRING – a number or word which is written in single quotes is called a string data type.*

*3] FLOAT – any number, positive or negative with decimal values is a float data type*

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

**Ans –**

*Expression is made up of operators(+,-,/), literals(string, int, float), and identifiers(names in classes or objects). All expressions represent values that result in values.*

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

**Ans –**

*Expressions give result in values weather they are string, integer, Boolean, etc. eg. Spam + 5 is an expression. Statements give a command or action eg. Print statement will print the variable value (Print spam will give the answer 15 after the addition is done)*

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 – ‘**spamspamspam’

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

**Ans –**

*In Python, variable names cannot start with numbers or be entirely of numbers. Thus, eggs is valid name as it consists of letters and 100 is invalid as it does not have an underscore or letter before it.*

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 –** *The error is caused because integers (99) and strings cannot be added.*

*To fix it, we have to convert the integer to a string by writing ’99 ’*