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' **values**

-87.8 **values**

- **expression**

/ **expression**

* **expression**

6 **values**

2. What is the difference between string and variable?

**Ans- Strings are sequences of characters that are used for conveying textual information.**

**\*print("Let's print out this string.")**

**\*output**

**Let's print out this string**

**Variable are symbols that you can use to store data in a program. You can think of them as an empty box that you fill with some data or value. Strings are data, so we can use them to fill up a variable. Declaring strings as variables can make it easier for us to work with strings throughout our Python programs.**

**a= "Sammy likes declaring strings."**

**Print(a)**

**Output**

**Sammy likes declaring strings**

3. Describe three different data types.

Ans-Integer (int)- Numeric data type for numbers without fraction. Ex—70,7.0

Floating Point (float)- Numeric data type for numbers with fractions Ex-3.5,4.5

String (str or text)- Sequence of characters, digits, or symbols—always treated as text Ex-hello, +1-999-666-3333

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

**Ans-The expression in Python produces some value or result after being interpreted by the Python interpreter. An expression in Python is a combination of operators and operands.**

**x = 25 # a statement**

**x = x + 10 # an expression**

**print(x)**

**35**

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

**Ans-An expression evaluates to a single value. A statement does not.**

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

bacon = 22

bacon + 1

**Ans-bacon 23**

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

'spam' + 'spamspam'

**Ans-output spamspamspam**

'spam' \* 3

**Ans-print('spam' \* 3)**

**output spamspamspam**

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

Ans-Because variable names cannot begin with a number

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

Int()

Float()

Str()

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

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

**Ans-The expression causes an error because 99 is an integer, and only strings can be concatenated to other strings with the + operator.**

**'I have eaten ' + str(99) + ' burritos.'**