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 are – ‘hello’, -87.8, 6

Expressions are - \*, -, /, +

2. What is the difference between string and variable?

**Ans** : Variables are symbols that can be used to store data in a program. String is a data to assign it to a variable. Simply, String is a type of variable.

3. Describe three different data types.

**Ans :** Integer – used to store numerical values

String – used to store Character data and should be enclosed in double quotes

Float – used to store floating point numbers(decimal values)

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

**Ans :** Expression is made up of Operator and Operands. Expressions are used to compute the result between operands with the help of operator and assign values to the variables.

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

Ans : An Expression always evaluates to a value. A statement does something, like creating a variable or displaying a value, it only does whatever the statement says.

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** : ‘spamspamapam’ – Both results the same string

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

**Ans :** A valid variable name starts with alphabet or Underscore(\_) and it should not start with number. A valid variable name can have numbers between 0-9.

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 :** Python doesn’t concatenate two different data types. Here string and interger data types are combined. We can resolve this by converting 99 to string type as follows:

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