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 which has some meaning whereas variable can store different data types.

For ex. “hello world” is a string

Var=”hello world”

Here, var is a variable which is storing a string data type.

3. Describe three different data types.

Ans-Three different data types are:

List: List can contain different elements of different data types unlike arrays in different languages. Lists are mutable.

Tuple: Tuples are immutable unlike lists. It can’t be edited like lists. It is ordered.

Set: Sets can’t have repeated elements and doesn’t follow any order.

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

Ans- Expressions are made up of variables and operators. They represents values. E.g Strings can also be an expression because they represent value.

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

Ans- An expression is something that can be reduced to a value.If it cannot be reduced to a value then it is a 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- ‘spamspamspam’

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

Ans- A valid variable name can not contain digit as the first place. It should always be an alphabet. Therefore, eggs is valid and 100 isn’t.

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

Ans- int(value)

Float(value)

Str(value)

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

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

Ans- 'I have eaten ' + ‘99’ + ' burritos.'

Error was caused because strings and int can’t be added. We have to convert int to string to add.