**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' :STRING

-87.8 : float

- : Expression

/ : Expression

* : Expression

6 : Integer

**2. What is the difference between string and variable?**

Ans:

String : Is a value which defined inside the quotes.

Variable : Is a name of the location where we can store different types elements. OR variable is used store the information.

**3. Describe three different data types.**

Ans : Integer: Integer value can be any length. Ex: 33,56,76

String : String is sequence of characters represented in quotation mark. s=”Python”

Boolean: True or False

List : is collection of heterogeneous elements, which is mutable. Ex: l=[2,33.4,’sinch’,]

Tuple : is collection of heterogeneous elements, which immutable. Ex: t=(2,35,’abc’,99.8)

Set: is collection of unique, unordered elements

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

Ans: Expression made up of variables , number and arithmetic operation

Expressions do : combination of variable and expressions which will produce some value**.**

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

Ans: Expression : Any element in our program that evaluates to some value. a=2+3

Statement : Represent an action or command E.x print statements, assignment statements

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

**bacon = 22**

**bacon + 1**

Ans : 23 Since, bacon is variable which is holding the value 22. So, bacon+1=23

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

**'spam' + 'spamspam'** = 'spamspamspam'(concatenation is possible is

String)

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

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

Ans: Variable name can’t be started with number, special case character like(@,\* etc)

Variable name can’t be started with character or with underscore (\_).

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

Ans : the integer :int()

floating-point number : float()

stringc: str()

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

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

Ans : Concatenation is possible only for string i.e string can only be concatenation with string only.

Fix: Represent the 99 with quotes.

'I have eaten ' + ‘99’ + ' burritos.'