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:Variable: Variable is a**store of information**, and we can call this variable whenever in program .

String: String is a type of information you would store in a Variable. A String is usually words, enclosed with ""

Eg: x ="Welcome to SoloLearn" x is the Variable, and we declared it as a String, use the single = to assign the text to it.

3. Describe three different data types.

**Ans:**

**1)String(str):** string is a text data type.This is represented with “” or ‘’.Its a immutable

Ex: “Hello Python”

**2)List:**List is a sequence data type and represented in [].it is a mutable

Ex: x=["apple", "banana", "cherry"]

**3)Dict:**It is a Mapping data type and represented as ‘key’ and ‘value’pair.

Ex: x = {"name" : "John", "age" : 36}

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

**Ans:** Expressions are mixed of operators and operands. The expression in Python produces some value or result after being interpreted by the Python interpreter.

Ex:c =a+b

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

**Ans:** In spam=10, spam is a variable name the number 10 is assigned to that variable.

Expressions can be assigned or used as operands, while statements can only be declared

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

bacon = 22

bacon + 1

**Ans:** After running above lines, bacon contains 23.

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

'spam' + 'spamspam'

'spam' \* 3

**Ans:** 'spam' + 'spamspam' it will perform a concatenation and gives result as spamspamspam

'spam' \* 3 it will perform  we can multiply elements gives result as spamspamspam

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

**Ans:** A variable name cannot start with a number.

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:** We can concatenate only str to str not with integer.

Solution: add single quotation to 99 to fix the error

'I have eaten ' + ‘99’ + ' burritos.'