**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:**

\* is an Expression

‘hello’ is a Value

-87.8 is a Value

- is an Expression

/ is an Expression

+ is an Expression

6 is a Value

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

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

**Eg** String 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:** There are six data types in python. Three of them are:

1. **Numeric:** This data type holds numberical values in Python. It consists three classes- int, float and complex.
2. **String:** This data type holds sequence of characters in Python. It consists class named ‘str’.
3. **Boolean:** This data type holds either ‘True’ or ‘False’ statement in Python. It consist class named ‘bool’.

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

**Ans:** An expression is a construct made up of variables, operators, and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value.

**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 but A statement does not.

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

bacon = 22

bacon + 1

**Ans:** The bacon variable is set to 20. The bacon + 1 expression does not reassign the value in bacon (that would need an assignment statement: bacon = bacon + 1).

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

‘spam’ + ‘spamspam’

‘spam’ \* 3

**Ans:** Both expressions evaluate to the string 'spamspamspam'.

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

**Ans:** 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?

**Ans:** The int(), float(), and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

**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. The correct way is I have eaten ' + str(99) + ' burritos.'.