1. In the below elements which of them are values or an expression? e.g.: - values can be

integer or string and expressions will be mathematical operators.

‘Hello’ - Value

-87.8 - Value

- -Expression

/ - Expression

+ - Expression

6 - Value

2. What is the difference between string and variable?

A Variable is used to store an information where as a String is a type of information to store in a Variable.

3. Describe three different data types.

**Numeric:**  integers, floating point numbers, and complex numbers will come under numeric data types.

**Dictionary:** Dictionaries are used to store data values in key: value pairs.

A dictionary is a collection which is ordered, changeable and do not allow duplicates.

**Boolean:** It's used to represent the truth value of an expression. Booleans represent one of two values: True or False.

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

An expression is a combination of operators and operands that is interpreted to produce some other value.

In any programming language, an expression is evaluated as per the precedence of its operators.

5. This assignment statements, like spam = 10. What is the difference between an

expression and a statement?

An Expression is a sequence or combination of values, [variables](https://codepict.com/python-variables/), [operators](https://codepict.com/python-operators-everything-you-need-to-know/) and [function](https://www.w3schools.com/python/python_functions.asp) calls that always produces or returns a result value.

Any **Instruction** that a programming language interpreter can execute is called a **Statement**.

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

bacon = 22

bacon + 1

Ans: 22

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

“spam” +”spamspam”

“spam” \* 3

Ans: “spamspamspam”

“spamspamspam”

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

Ans: Variable name always should start with character.

Variable name can’t start with an integer.

9. What three functions can be used to get the integer, floating-point number, or string

version of a value?

Ans: **int ()** function for integer, **float ()** function to pass float values, and **str ()** function for string values.

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

“I have eaten” +99+” burritos”

Ans: because for any type of function data type must match.

Here 99 is a integer type data

“I have eaten” and “burritos.” are string type data

To fix this error we need convert 99 to a string type by using str(99) function.

“I have eaten” + str (99) +” burritos.”