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.

Ans: \* : exressionos

'hello' = values

-87.8 = values

- = expressions

/ = expressions

* = expressions

6 = values

2. What is the difference between string and variable?

|  |  |
| --- | --- |
| String | Variable |
| It is a data type | Variable is a temporary location where you store data |
| String cannot store any data | Variable can store any data like string, integer, list, tupels etc. |
| String data is enclosed in “ ” | Variable is not enclosed in “ “ |
| Ex Code: M = “Sripad”  Here “Sripad” is the string. | Ex Code: M = “Sripad”  Here M is the Variable in which that string is stored |
| String is not callable | Variable is callable which gives the output of data that is stored in it. |

3. Describe three different data types.

Ans: String, Int, float, complex, list, tuples, dictionary, set, None

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

Ans: An expression is a combination of operators and operands that is interpreted to produce some other value. Expressions result in some value.

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

Ans:

Assignment is the process in which Assignment operator “=” is used to assign a value of a variable.

Expression is a set of variables, constants and arithmetical operators designed to arrive to certain conclusion or value after operating on them.

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

bacon = 22

bacon + 1

Ans: bacon = 23

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

'spam' + 'spamspam' = ‘spamspamspam’

'spam' \* 3 = ‘spamspamspam’

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

Ans: 100 is a value while eggs is a string. Python takes 100 as an integer by default unless and until it is enclosed in a “” and variable cannot be defined in “”.

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 for floating point number and str for string version of a alue.

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

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

Ans: ‘I have eaten + ‘99’ + ‘burritos’