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?

String: String is a data type with a sequence of characters.

Eg: Str = “RUSHIKESH” or “1000RUSHIKESH”

Variables: Are used to store the data of various data types

Eg : a = 10 (a = variable, 10= integer datatype)

3. Describe three different data types.

Integer : Eg a = 10

Float : Eg b = 3.13

Complex : Eg = 3+4j

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

Expression contains variables, operators which are constructed according to the syntax of language.

Expression : Expression are made or constructed to evaluate a certain task.

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

In programming language terminology, an “expression” is a combination of values and functions that are combined and interpreted by the compiler to create a new value, as opposed to a “statement” which is just a standalone unit of execution and doesn’t return anything.

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

bacon = 22

bacon + 1

o/p : 23

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

'spam' + 'spamspam' o/p:'spamspamspam'

'spam' \* 3 o/p : ‘spamspamspam’

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

Because a variable name cannot start with a number or underscore.

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

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

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

Because this expression is an example of heterogeneous datatype.

We can correct it like this : 'I have eaten ' + ‘99’ + ' burritos.'