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. A variable is a space or memory allocated to store information whereas string is a data type or a type of information stored in a variable.

3. Describe three different data types.

* int—In this data type, numeric values are stored. Eg. 23,1,-3, etc
* float—It represents floating point numbers or numbers with decimal points.

Eg. 12.2, 503.21

* string—It is used to store string values i.e. sequence of characters. Single(‘ ’) or double(“ ”) inverted comas are used .

Eg. ‘Gujarat’, “abc”

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

Ans. An expression is a combination of values, variables and operators. It combines values and operators and evaluates down into 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 value whereas a statement represents an action or command.

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. Both will be same.

spamspamspam

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

Ans. Eggs is a valid variable name while 100 is invalid because a variable name must start with a letter or underscore character and 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() and str()

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

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

Ans. The above expression causes an error because of different datatypes i.e. 99 is an integer while other operands are string datatype.

It can be fixed like this:

'I have eaten ' + str(99) + ' burritos.'