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

Answer: mathematical operators -- *,+,-,/

                Values – i) 'hello' is string value

                        ii) -87.8 is a float value

                  iii) 6 is a integer value

2. What is the difference between string and variable?

Answer: String is just a type of variable. Python detects the type of variable automatically. A string is written between quotes . Variables are used to store values.

3. Describe three different data types.

Answer: The three data types introduced in this chapter are integers, floating-point numbers, and strings.

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

Answers: An expression is a combination of values and operators. All expressions turn down to a single value.

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

Answers: 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

Answers: bacon conatain 22. But if we assign a new statement like A=bacon + 1 then A = 23 we can get

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

'spam' + 'spamspam'

'spam' * 3

Answers: Same outcome ; outcome will be – 'spamspamspam'

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

Answers: 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?

Answers: Integers – int() , floating-point number – float() , string – str().

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

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

Answers : concatenation error will arise because 99 is an integer.

 For fixing we can define 99 as str(99)

Correct way to write - 'I have eaten'   + str(99) + 'burritos.'