1.   What are the differences between operators and values from the following?

Operators are used to perform operations on variables and values.

Variables acts as a placeholder to represent the values / data.

- (*) is an operator for multiplication.
- ('hello') - Is a value in the form of a string.
- (-87.8) - Is a value in the form of integer.
- (-) - Is an operator for subtraction.
- (/) - Is an operator for division.
- (+) - Is an operator of addition.
- 6 – Is a value in the form of integer.

2.   What is the difference between string and variable?

String is a type of data structure.

Variable is something that acts as a placeholder to represent the data.

3. Describe three types of data forms.
- Integer
- Float
- Character
- Boolean
- Double
- String
- Complex

4. What makes up an expression? What are the functions of all expressions?

Expression is made by combination of datatypes. Expression is used to perform any mathematical operation with the values or concatenate the values.

Ex – (2*3)

5. In this chapter, assignment statements such as spam = 10 were added. What is the difference between declaration and an expression?

An expression evaluates to a value. A statement/declaration does something.

Ex: spam = 10 is a declaration

Spam + 10 is an expression.

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

Bacon = 22

Bacon + 1

Bacon = 23

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

Spam + 'spamspam'= 'spamspamspam'

(spam * 3) = 'spamspamspam'

8. Why is it that eggs is a true variable name but 100 is not?

A variable cannot start with a number or special chars such as (#,%,$,&) also it cannot contain the special chars in it.

A variable should follow either one of these conventions:

Snakecase: Words are delimited by an underscore.

Pascalcase: Words are delimited by capital letters.

Camelcase: Words are delimited by capital letters, except the initial word.

9. Which of the following three functions may be used to convert a value to an integer, a floating point number or a string?

Suppose, a = '123'

Type conversion is as follows:

Conv = int(a)

Conv = float(a)

Conv = str(a)

10. What is the error caused by this expression? What would you do about it?

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

TypeError: Can't convert 'int' object to str implicitly.

We have to convert 99 to string first then try to concatenate.