### Assignment No. 1

1) In the below elements which of them are values or an expressions? eg: values can be integer or string and expressions will be mathematical operators.

| No | Values (Integer/String) | Expressions (mathematical operators) |
|----|-------------------------|--------------------------------------|
| 1  | 'hello'                 | *                                    |
| 2  | -87.8                   | -                                    |
| 3  | 6                       | /                                    |
| 4  |                         | +                                    |

#### 2) What is the difference between string and variable?

String is a data type of python, and variable means it store the information of the data types like str, int etc.

#### 3) Describe three different data types.

- String sequence of characters.
- Integer- numbers except the decimal points and fractional components.
- Boolean-True/False
- Floating point- decimal numbers.

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

An expression is a combination of values, variables, operators, and calls to functions.

Expressions are representation of values, variables, operators.

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

An expression evaluates to a single value. A statements does not.

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

bacon = 22

bacon + 1

23

```
In [4]: bacon =22
In [5]: bacon + 1
Out[5]: 23
```

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

```
'spam' + 'spamspam'
```

'spam' \* 3

```
In [6]: 'spam'+'spamspam'
Out[6]: 'spamspamspam'
In [8]: 'spam'*3
Out[8]: 'spamspamspam'
```

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

Because variable names can not begin with numbers.

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

Int()

Float()

Str()

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

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

Since 99 is an integer concatenation only having with string

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