Assignment no.1 (Kunal Chauhan)

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?

Answer : Variables are symbols that you can use to store data in a program. You can think of them as an empty box that you fill with some data or value. Strings are data, so we can use them to fill up a variable. Declaring strings as variables can make it easier for us to work with strings throughout our Python programs.

3. Describe three different data types.
   - Integer
   - Float
   - Complex number

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

Answer : An expression is a combination of operators and operands that is interpreted to produce some other value. In any programming language, an expression is evaluated as per the precedence of its operators.

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

Answer : An expression evaluates to a value. A statement does something.

6. After running the following code, what does the variable bacon contain?
bacon = 22
bacon + 1

Answer : bacon will contain value 22.

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

'spam' + 'spamspam'
'spam'* 3

Answer : In both the cases the value will be 'spamspamspam'.

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

Answer : Because 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?

Answer : The int() , float() , and str( ) functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

10. Why does this expression cause an error? How can you fix it?
'I have eaten' + 99 + 'burritos.'

Answer : can only concatenate str (not "int") to str. We can fix it by converting int to str.
         'I have eaten' + ' 99 ' + 'burritos.'