# ASSIGNMENT -- 1

# 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

* The operators are +, -, \*, and /.
* The values are 'hello', -88.8, and 5.

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

Strings are typically enclosed in single or double quotes to distinguish them from variable names or other code elements.

A variable is a fundamental concept in programming. It's a symbolic name that represents a memory location where data can be stored.

# 3. Describe three different data types.

* **Integers (int):**  Integers represent whole numbers, positive or negative, without any decimal component. They have arbitrary precision in Python 3, meaning their size is limited only by available memory.
* **Floating-Point Numbers (float):**  Floats represent real numbers that have a decimal point or an exponential notation. They are used for calculations requiring fractional values and provide a certain level of precision.
* **Strings (str)**:  Strings are sequences of characters, used to represent text data. They are enclosed within single quotes (' '), double quotes (" "), or triple quotes (''' ''' or """ """) for multi-line strings. Strings are immutable, meaning their content cannot be changed after creation.

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

* + An expression is a combination of values and operators.
  + All expressions evaluate to a single value.

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

A statements don't usually generate a direct result or return a value, whereas expressions do.

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

bacon = 22

bacon + 1

Result = 23

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

‘spam’+’spamspam’

‘spam’\*3

Result = ‘spamspamspam’

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

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