Strings (Text)

```
In [10]:
   : m = "CS 101"
   : b = "CS 102"
   : u = "Iliinois"
   : print(m, b, u)
   :
   : "Welcome to CS 101"
   : "Enter a value:"
   : a = input()
   : b = input()
   : c = input()
   : print(a, b, c)
```

Strings in Python are IMMUTABLE meaning, strings cannot be updated in place.

```
In [11]:
   : s = "Hello"
   : s[1] = 'X'  # TypeError
```

Slicing

```
In [12]:
   : mylist = [0, 1, 2, 3, 4]
   : mytuple = (0, 1, 2, 3, 4)
   : mystring = "Hello"
   :
   : mylist[1:3]  # [1, 2]
   : mytuple[1:3]  # (1, 2)
   : mystring[1:3]  # ell
```

Data Types

```
In [13]:
   : a = 5
   : b = '5'
   : print(a, type(a))
   : print(b, type(b))
```

Variables in Python get their data type at the assignment time.

```
In [14]:
   : x = 3.14
   : x = 3.14  # Reassigning the same variable with a different value.
   : print(a, b, type(a))
   :
   : a = 5
   : b = "5"
```