**Python modules for RasberryPi programming**

As we know python is growing very fast , in arduino also we use python libraries to make programming task bit easier.

**gpiozero library**

1. **LED:**

gpiozero library has different classes to access different interfacing devices .Suppose to make led work we have **LED** class.

Event handeling

Create a button pin

Import library

Make led on

Instantiate one led pin

Import gpiozero library

**from gpiozero import LED**

**led=LED(pin)**

**led.on()**

**led methods :**

1. **Off**
2. **On**
3. **toggle**
4. **blink()**
5. **Button :**

from gpiozero import Button

button=Button(pin)

**if button.is\_pressed:**

**print(`button pressed`)**

Button functionality includes the properties

1. is\_pressed
2. is\_held
3. wait\_for\_press()
4. wait\_for\_release.

Like this we can use simple python to do various things

**String Indexing and Slicing** (s[a:b] means index a to length (b-a) or a to b index but not including b)

• s[0]

• s[:5]

• s[4:]

• String is immutable (ex. s[4]='a' will not replace 'a' and index 4 of s)

**String Methods**

A method is a function inside of an object.

• The general form of a method call is:

• 1) object.method(arguments) o

2) dir(str)

3) help(str.method)

**Lists**

Like for strings, slicing and indexing can also be used for lists

List = ['a','b',1]

length of list len(list)

• smallest element in list min(list)

• largest element in list max(list)

• sum of elements of list (where list items must be numeric) sum(list)

**Formatting output using format method :**

**Syntax:**

***string*.format(*value1, value2...*)**

**eg:**

"My name is {fname}, I'am {age}".format(fname = "shreenidhi", age =21)