Calling Python script from MATLAB

This is a sample project to demonstrate how to call Python script from MATLAB.

Part 1: calling python method (def in Lib.py)

```
py.modules.Lib.Show_Text('KAZUKI')
```

```
Input value is My name is Kazuki
```

```
val = py.modules.Lib.Plus(1,2)
```

```
val = 3
```

Part 2: calling python class (class in Lib.py)

```
cl = py.modules.Lib.TestClass(3.0,4.0)
```

```
cl =
  Python TestClass with properties:

    b: 4
    a: 3

    <modules.Lib.TestClass object at 0x00000000FDCCD1D0>
```

```
r = cl.Multiply_Values()
```

```
r = 12
```

Part 3: Running python code itself (Run.py)

```
system('python modules/Run.py');
```

```
Dice 1 is 4
Dice 2 is 1
Sum is odd number.
```

 # Appendix A: Lib.py

```
def Show_Text(text):

print('Input value is: {0}'.format(text))

def Plus(a,b):

return a+b

class TestClass():

def __init__(self,a,b):

self.a = a

self.b = b
```

```
def Multiply_Values(self):
return self.a*self.b
```

Appendix B: Run.py

```
import numpy as np
dice1 = np.random.randint(1,7)
dice2 = np.random.randint(1,7)
print('Dice 1 is {0}'.format(dice1))
print('Dice 2 is {0}'.format(dice2))
if (dice1+dice2)%2 == 0:
print('Sum is even number.')
else:
print('Sum is odd number.')
```