In [1]:

```
import numpy as np
import matplotlib.pyplot as plt
```

In [3]:

```
x = np.arange(0, 1, 0.05)
x
```

Out[3]:

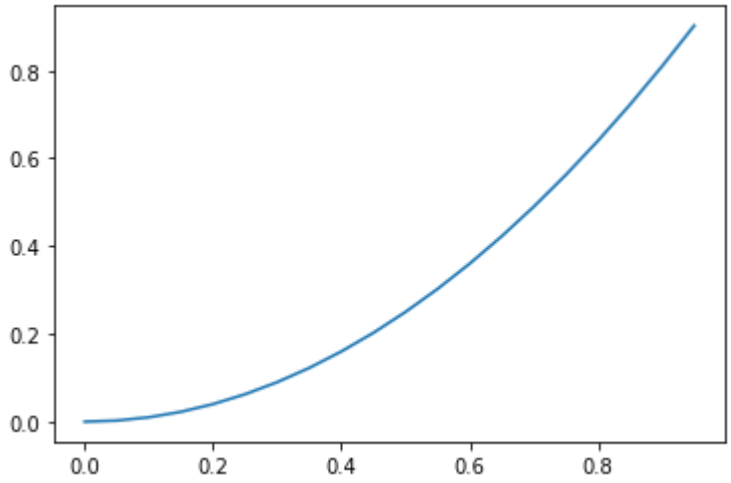
```
array([0.  , 0.05, 0.1 , 0.15, 0.2 , 0.25, 0.3 , 0.35, 0.4 , 0.45, 0.5 ,
       0.55, 0.6 , 0.65, 0.7 , 0.75, 0.8 , 0.85, 0.9 , 0.95])
```

In [4]:

```
y = x**2
z = x**3
```

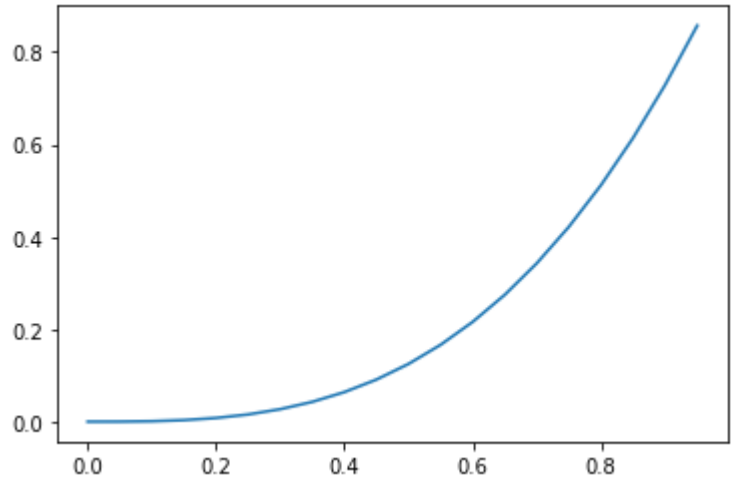
In [5]:

```
plt.plot(x,y)
plt.show()
```



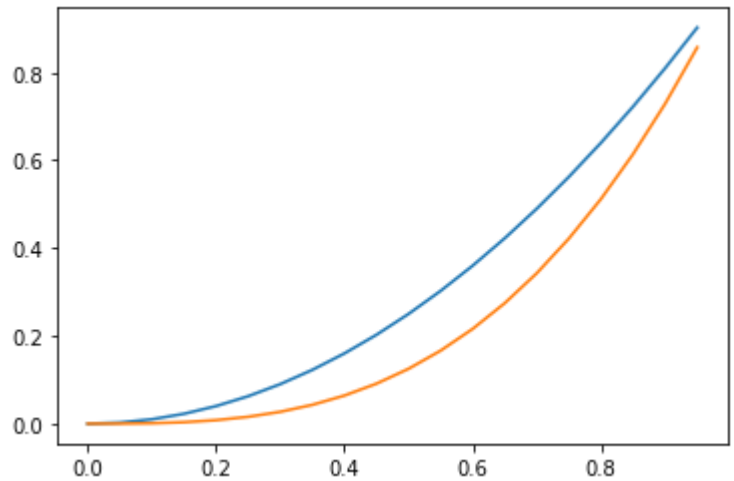
In [6]:

```
plt.plot(x,z)
plt.show()
```



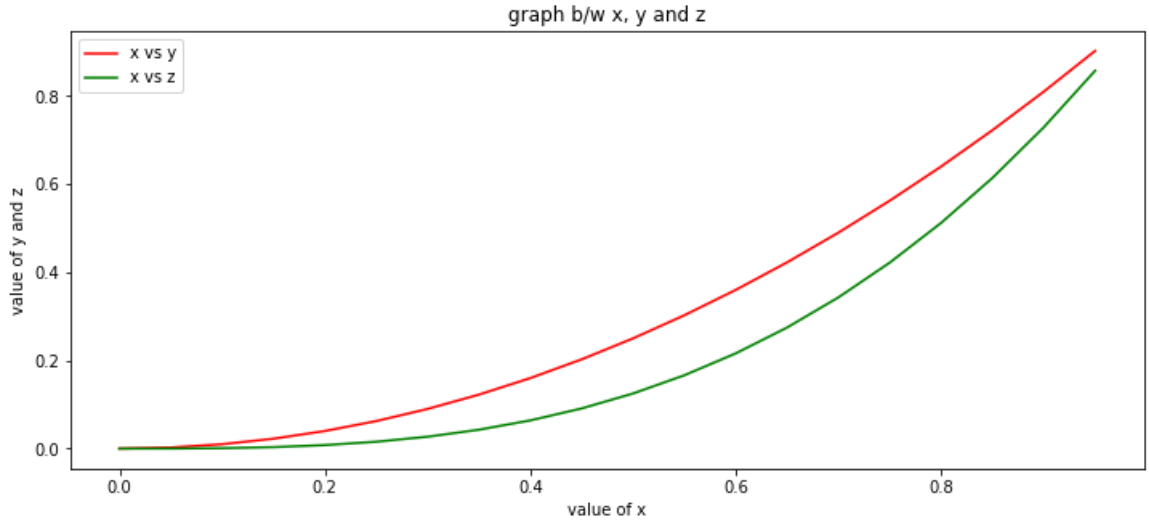
In [7]:

```
plt.plot(x,y)
plt.plot(x,z)
plt.show()
```



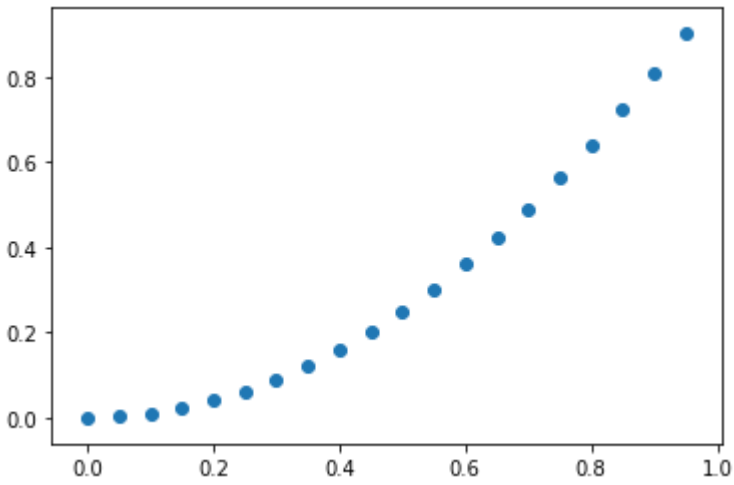
In [12]:

```
plt.figure(figsize=(12, 5))       # figsize = (width, height(in cm))
plt.plot(x,y, label = "x vs y", c = 'r')
plt.plot(x,z, label = "x vs z", c = 'g')
plt.xlabel("value of x")
plt.ylabel("value of y and z")
plt.title("graph b/w x, y and z")
plt.legend()
plt.show()
```



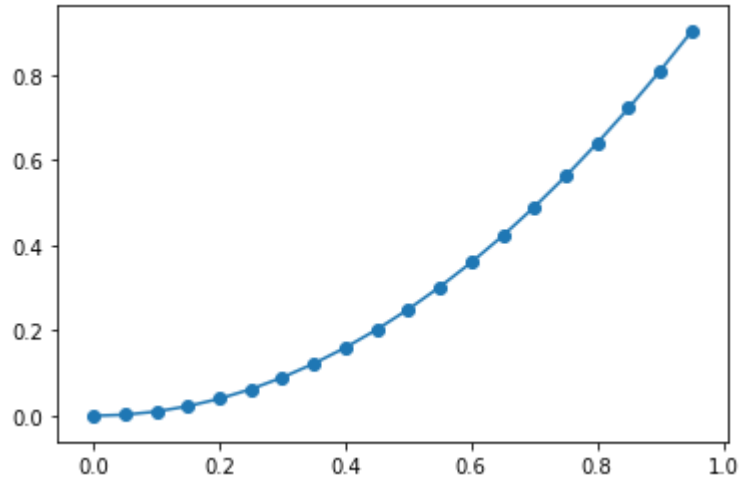
In [15]:

```
# scatterplot
plt.scatter(x, y)
plt.show()
```



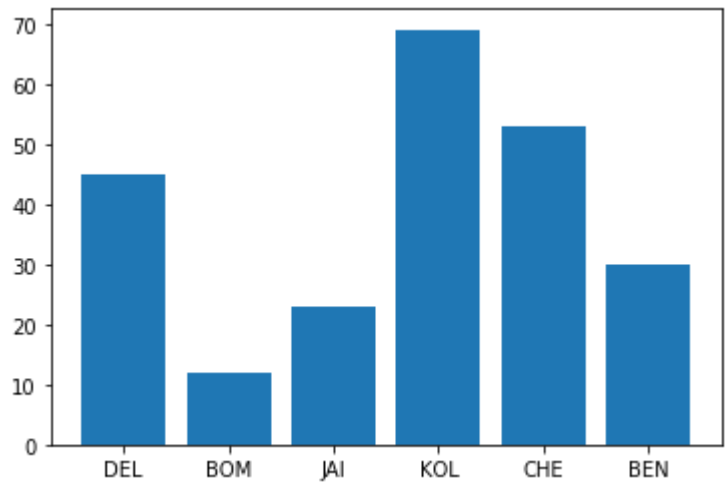
In [16]:

```
plt.scatter(x, y)
plt.plot(x, y)
plt.show()
```



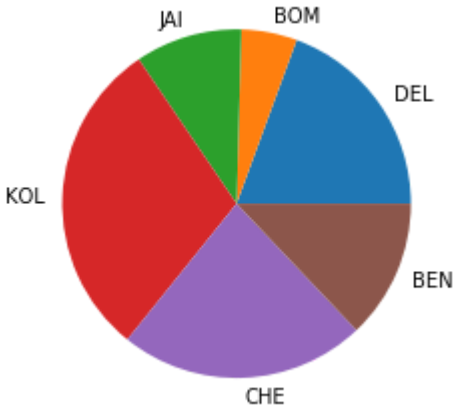
In [17]:

```
# barplot
data = [45, 12, 23 ,69, 53, 30]
names = ['DEL', 'BOM', 'JAI', 'KOL', 'CHE', 'BEN']
plt.bar(names, data)
plt.show()
```



In [18]:

```
plt.pie(data, labels = names)
plt.show()
```



In [ ]:

```

```