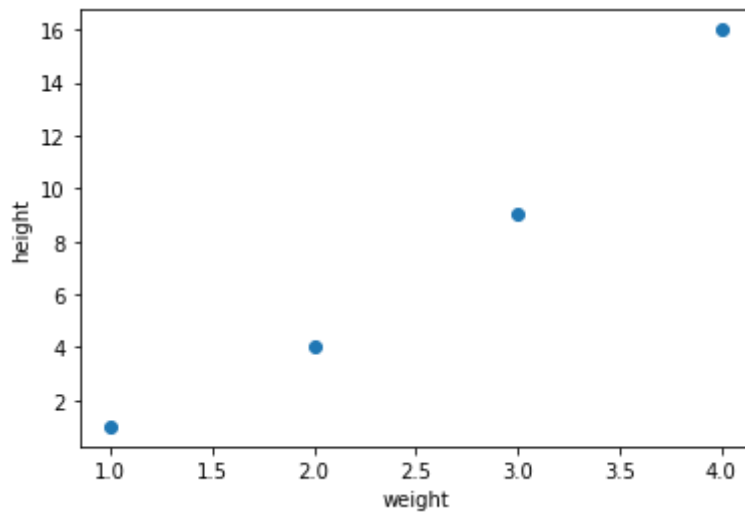
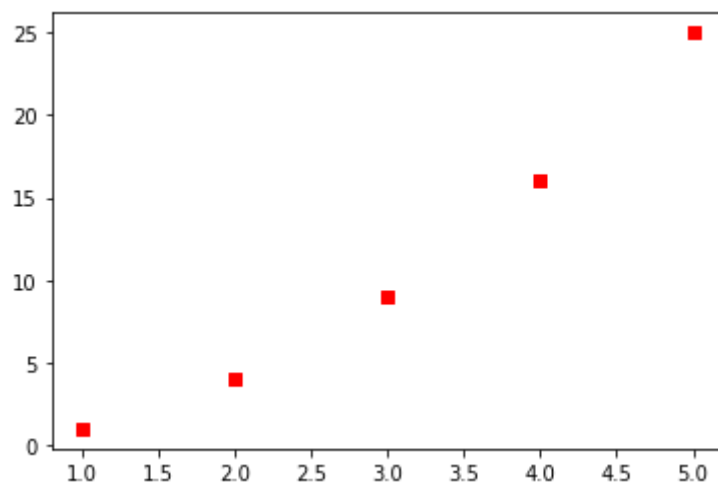


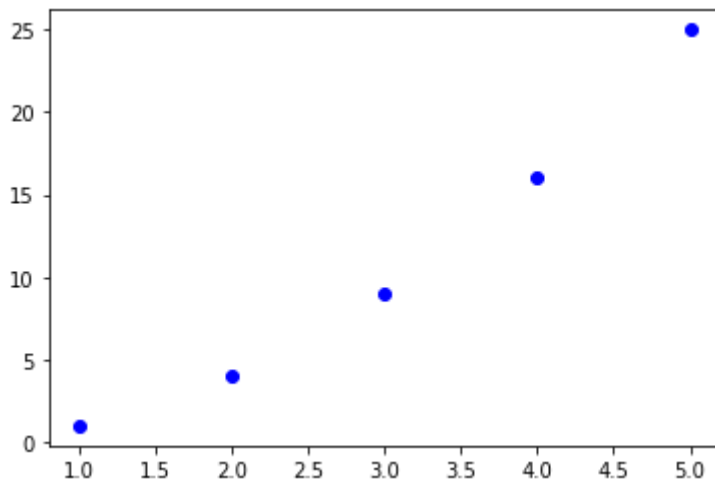
```
In [1]: import matplotlib.pyplot as plt
import numpy as np

x = [1, 2, 3, 4]
y = [1, 4, 9, 16]
plt.scatter(x, y)
plt.ylabel('height')
plt.xlabel('weight')
plt.show()
```



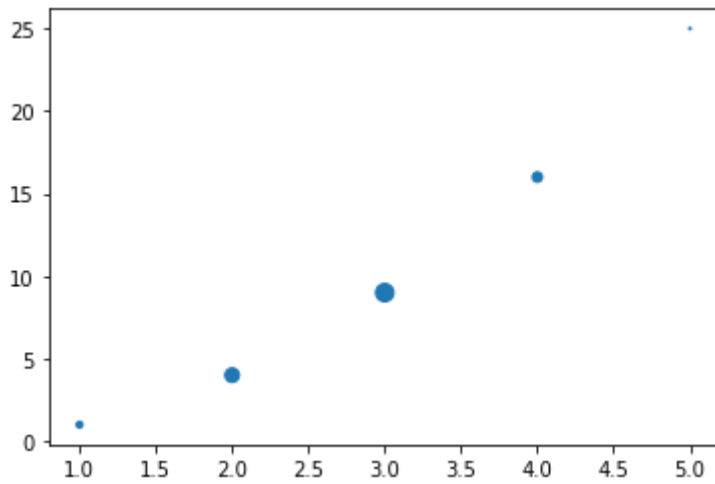
```
In [6]: #changing color, points marker
x = [1, 2, 3, 4, 5]
y = [1, 4, 9, 16, 25]
plt.scatter(x, y, color='r', marker='s') #single color for all points, points mark
plt.show()
plt.scatter(x, y, color='b')
plt.show()
```





In [7]:

```
#changing intensity of points
x = [1, 2, 3, 4, 5]
y = [1, 4, 9, 16, 25]
z = [10, 50, 80, 25, 1]    #intensity of points
plt.scatter(x, y, z)
plt.show()
```

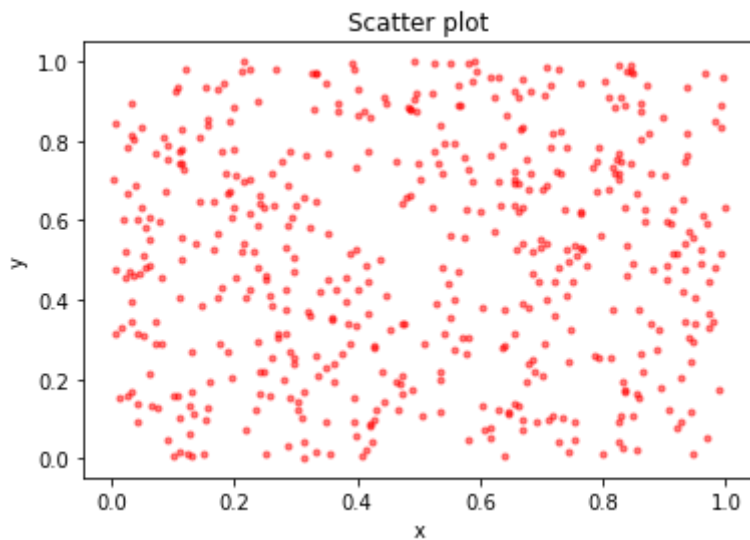


In [17]:

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

# Create data
N = 500
x = np.random.rand(N)
y = np.random.rand(N)
area = np.pi*3

# Plot
plt.scatter(x, y, s=area, c='r', alpha=0.5)
plt.title('Scatter plot')
plt.xlabel('x')
plt.ylabel('y')
plt.show()
```



In [18]:

```
#Scatter plot with groups
import numpy as np
import matplotlib.pyplot as plt

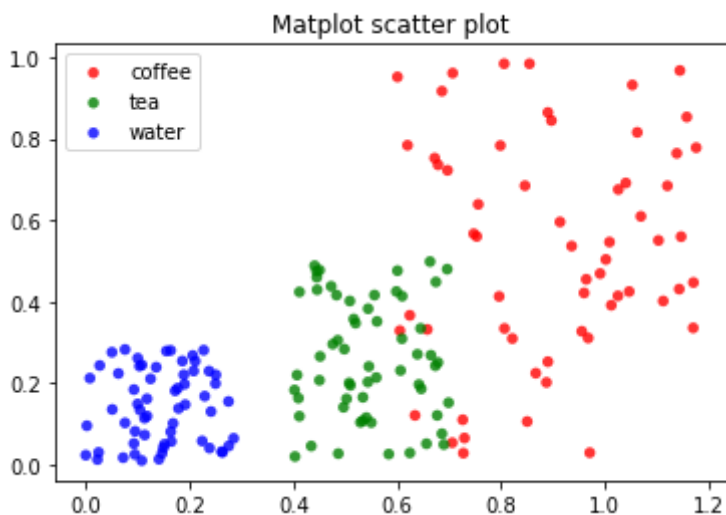
# Create data
N = 60
g1 = (0.6 + 0.6 * np.random.rand(N), np.random.rand(N))
g2 = (0.4+0.3 * np.random.rand(N), 0.5*np.random.rand(N))
g3 = (0.3*np.random.rand(N),0.3*np.random.rand(N))

data = (g1, g2, g3)
colors = ("red", "green", "blue")
groups = ("coffee", "tea", "water")

# Create plot
fig = plt.figure()
ax = fig.add_subplot(1, 1, 1, facecolor='white')

for data, color, group in zip(data, colors, groups):
    x,y = data
    ax.scatter(x, y, alpha=0.8, c=color, edgecolors='none', s=30, label=group)

plt.title('Matplot scatter plot')
plt.legend(loc=2)
plt.show()
```



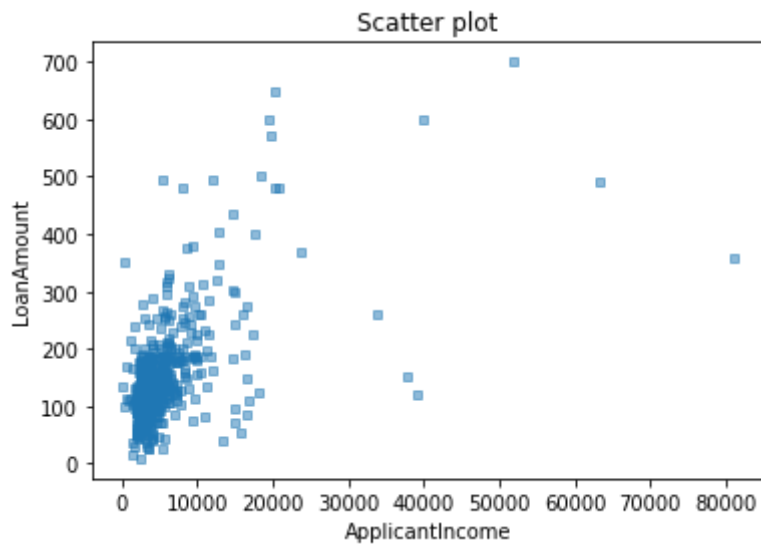
In [21]:

```
import pandas as pd
```

```
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
import statistics as st

df = pd.read_csv("C:\\Users\\Suresh Jamadagni\\downloads\\train.csv")

plt.scatter(df['ApplicantIncome'],df['LoanAmount'], s=area, marker='s', alpha=0.5)
plt.title('Scatter plot')
plt.xlabel('ApplicantIncome')
plt.ylabel('LoanAmount')
plt.show()
```



In []: