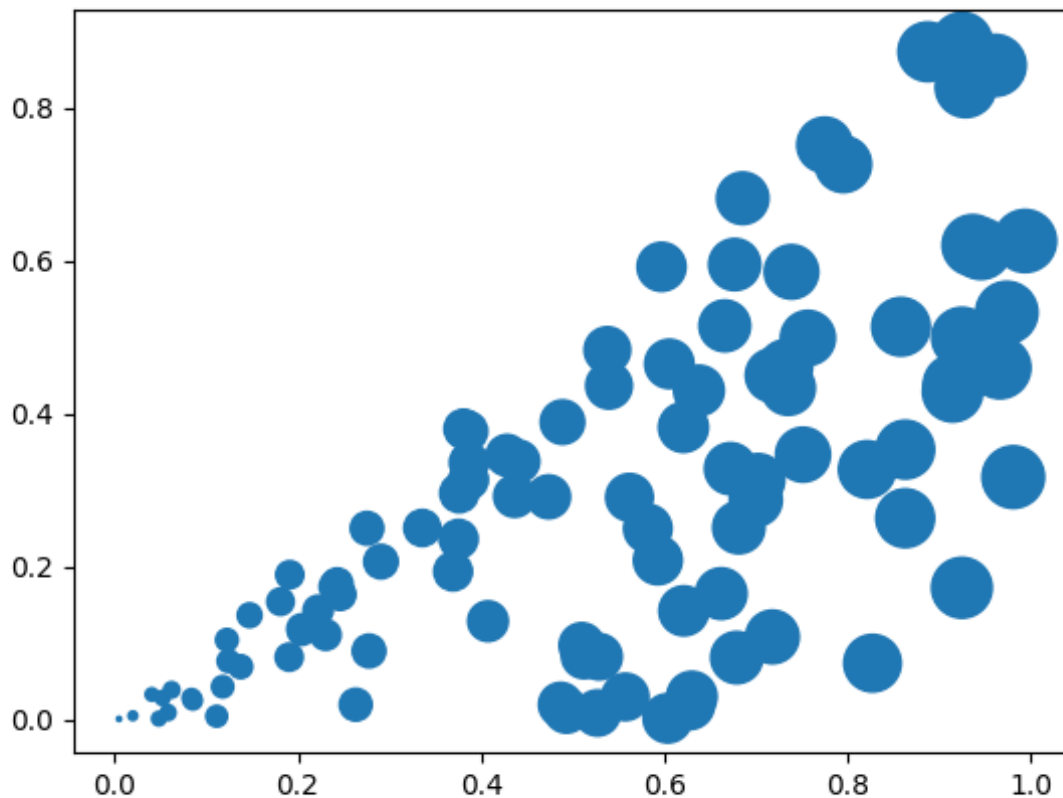


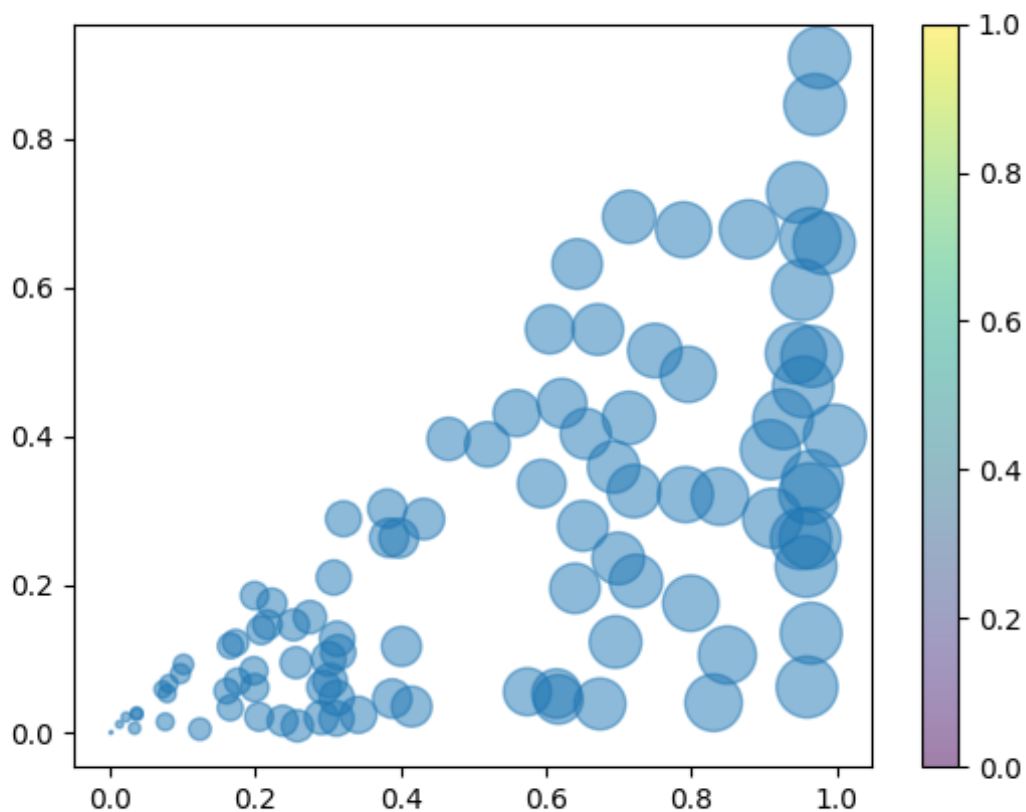
every one know how scatter plot looks but why we are using scatter plot('scatter()') instead of continuous('plot()') the main reason is we can plot efficiently smaller dataset in scatterPlot and we can set size and colour of each point individually the benefit of this is data is look more clear and defined but in continuous plotting data points it makes clone but it has its own benefits of plotting large dataset.

eg of how to create a scatterPlot, here we are using random data.

```
import matplotlib.pyplot as plt
import numpy as np
x = np.random.rand(100) #rand() generates 100 random number.
y = np.random.rand(100)*x
plt.scatter(x, y, s=x*500)
plt.show()
```



```
lets make it better looking and understandable scatterPlot
import matplotlib.pyplot as plt
import numpy as np
x = np.random.rand(100) #rand() generates 100 random number.
y = np.random.rand(100)*x
#value of alpha lies between 0(transparent) to 1(opaque).
#s parameter is used to define the size of circles.
#cmap parameter is used to add different colour scale(here
viridis sequential colormap is used).
plt.scatter(x, y, cmap='viridis', s=x*500, alpha=0.5)
#colorbar() is used to add colour bar.
plt.colorbar()
plt.show()
```



#we can see other parameters of scatter plot by 'plt.scatter'