In [24]:
```python
from sklearn.cluster import KMeans
from sklearn.mixture import GaussianMixture
import numpy as np
import matplotlib.pyplot as plt
X = np.genfromtxt('clusterdata.csv',delimiter=',',skip_header=1)
X = X[:,1:]
f1 = X[:,0]
f2 = X[:,1]

colors = ['b', 'g', 'r']
markers = ['o', 'v', 's']


#data
plt.subplot(511)
plt.xlim([0, 100])
plt.ylim([0, 50])
plt.title('Dataset')
plt.ylabel('speeding_feature')
plt.xlabel('distance_feature')
plt.scatter(f1,f2)

#kmeans
plt.subplot(513)
plt.xlim([0, 100])
plt.ylim([0, 50])
model = KMeans(n_clusters=3)
model.fit(X)
plt.title('Kmeans')
plt.ylabel('speeding_feature')
plt.xlabel('distance_feature')
labels = model.predict(X)
for i,l in enumerate(labels):
    plt.plot(f1[i],f2[i],color=colors[l],marker=markers[l])

#gaussian
plt.subplot(515)
plt.xlim([0, 100])
plt.ylim([0, 50])
model = GaussianMixture(n_components=3)
model.fit(X)
plt.title('Gaussian Mixture')
plt.ylabel('speeding_feature')
plt.xlabel('distance_feature')
labels = model.predict(X)
for i,l in enumerate(labels):
    plt.plot(f1[i],f2[i],color=colors[l],marker=markers[l])

plt.show()
```