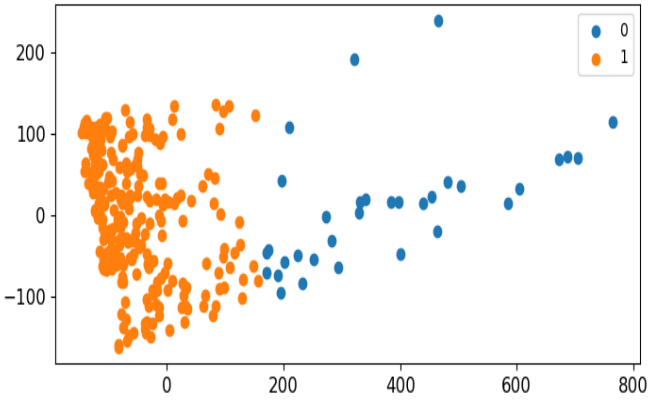
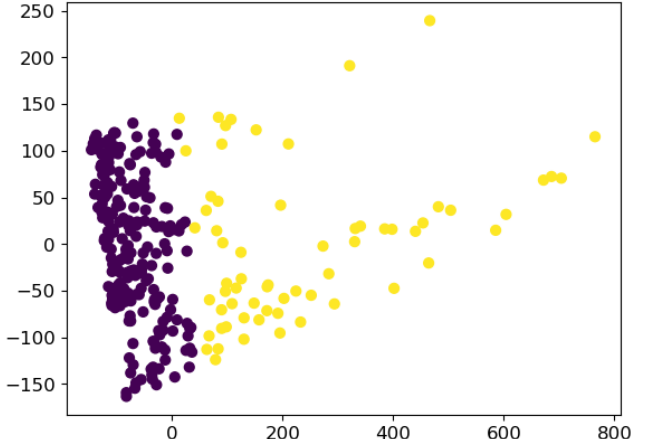


## WEEK7 LAB CLUSTERING

ALGORITHM	ACCURACY	INERTIA	Correctly classified instances	VISUALISATION (we used pca for 2D visualisation)
K-MEANS	0.441282	3972590.6416889783	124	
EM- GMM	0.3950178	-	111	

### CONCLUSION

K-means clustering performs better than GMM. However, the caveat is that this is binary classification as we transformed our target variable from numeric to binary, it has only 2 classes. The K-means model keeps getting better and better with increasing number of clusters. Below is the inertia curve that applies the elbow technique to figure out the optimal number of clusters in our K-means clustering. Optimal number of clusters is 4 as shown in the graph.

