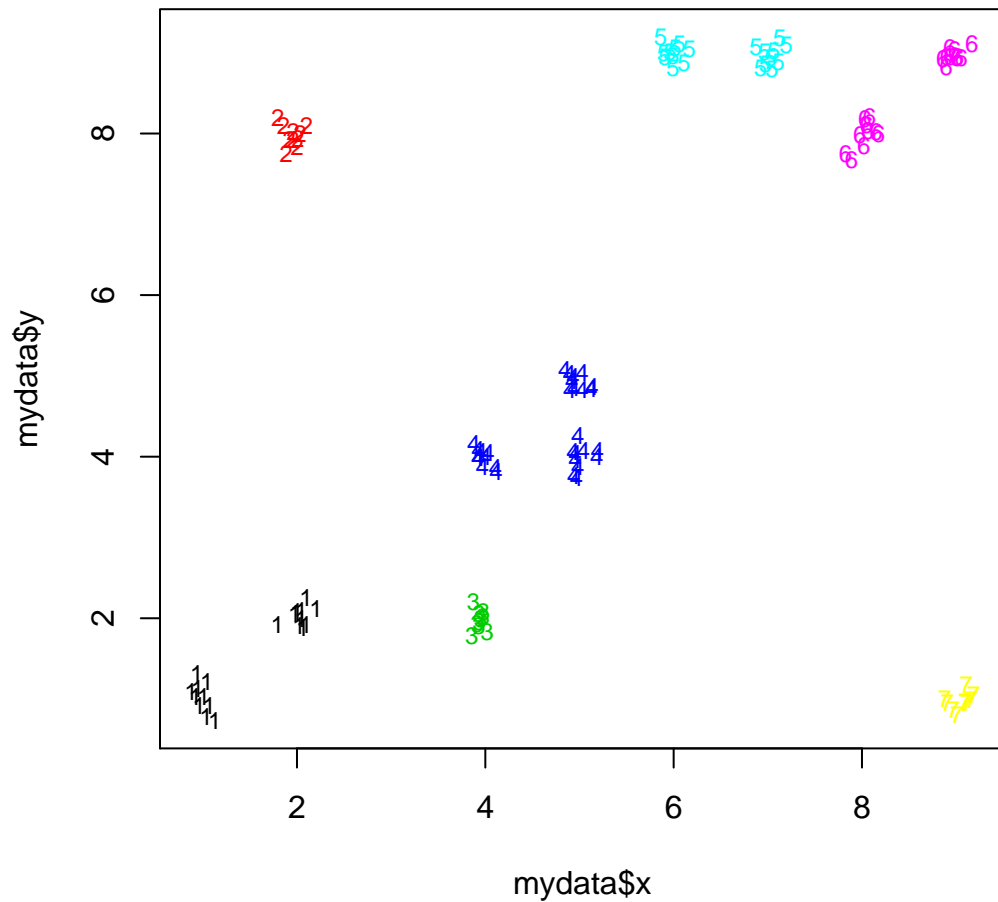
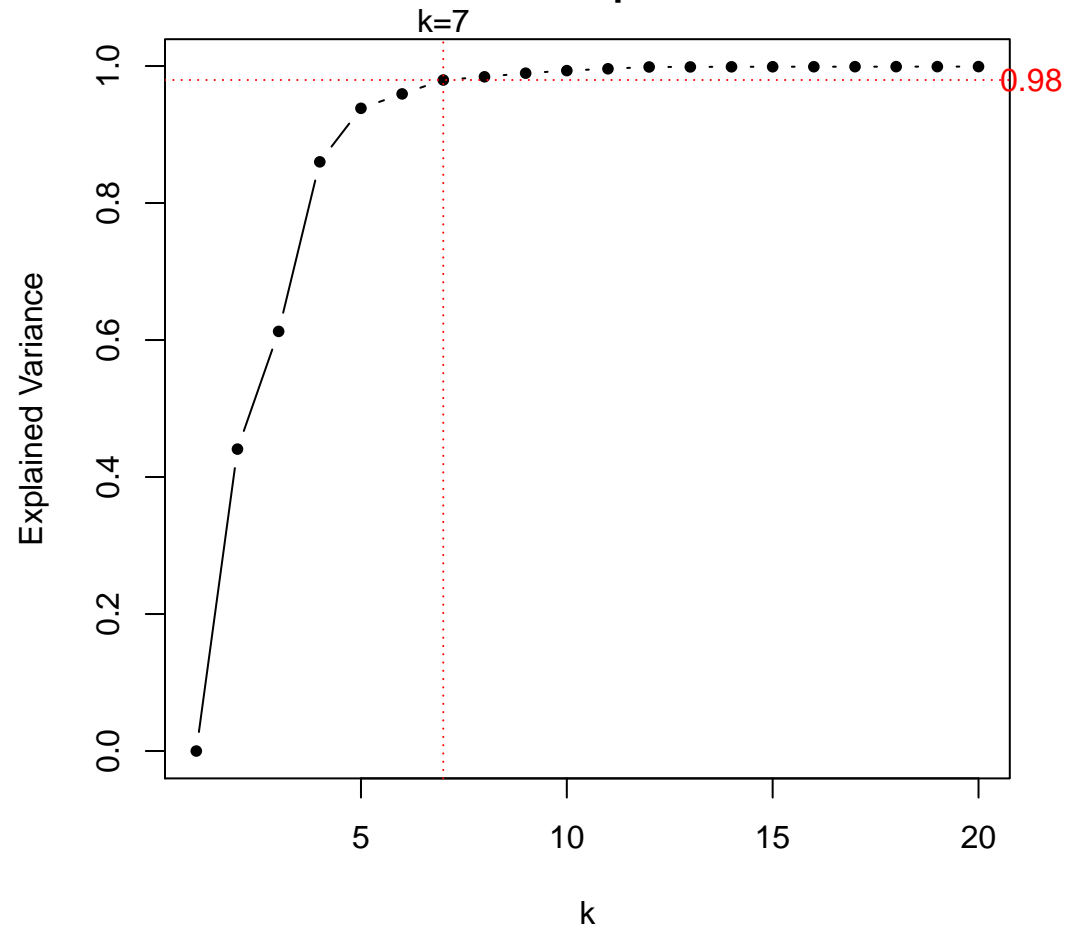


### Clusters of simulated data

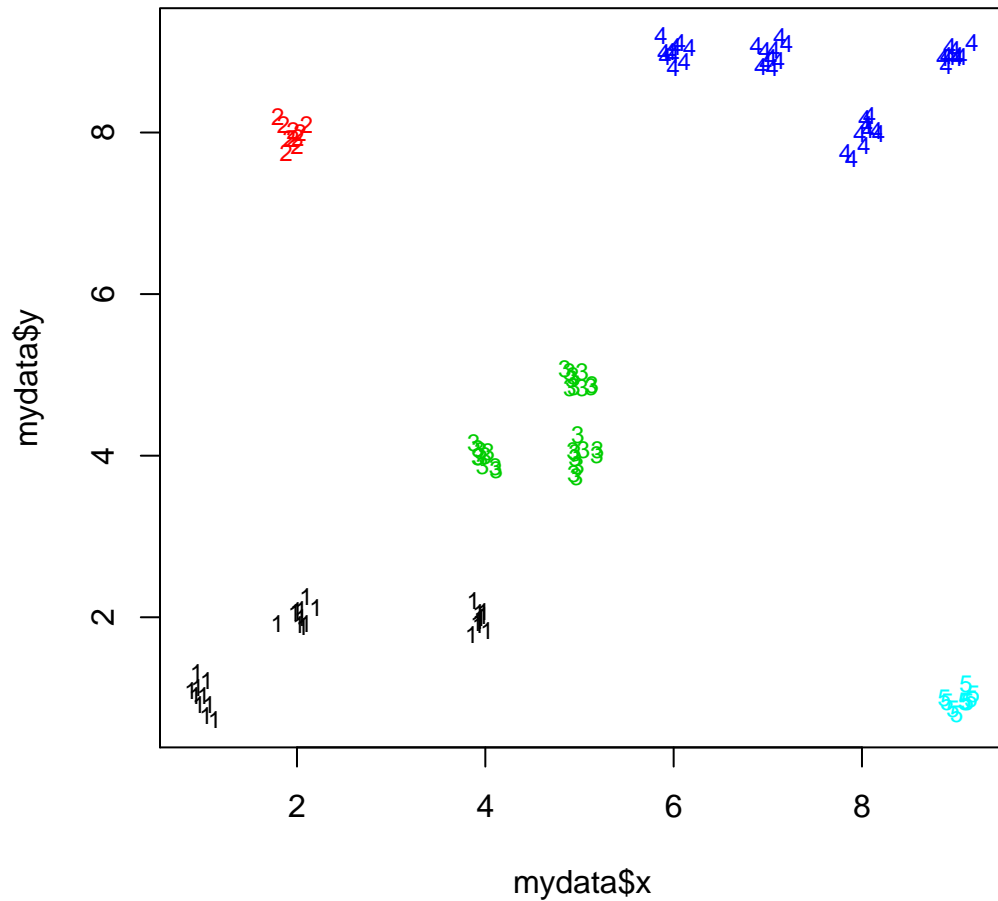


### Elbow plot

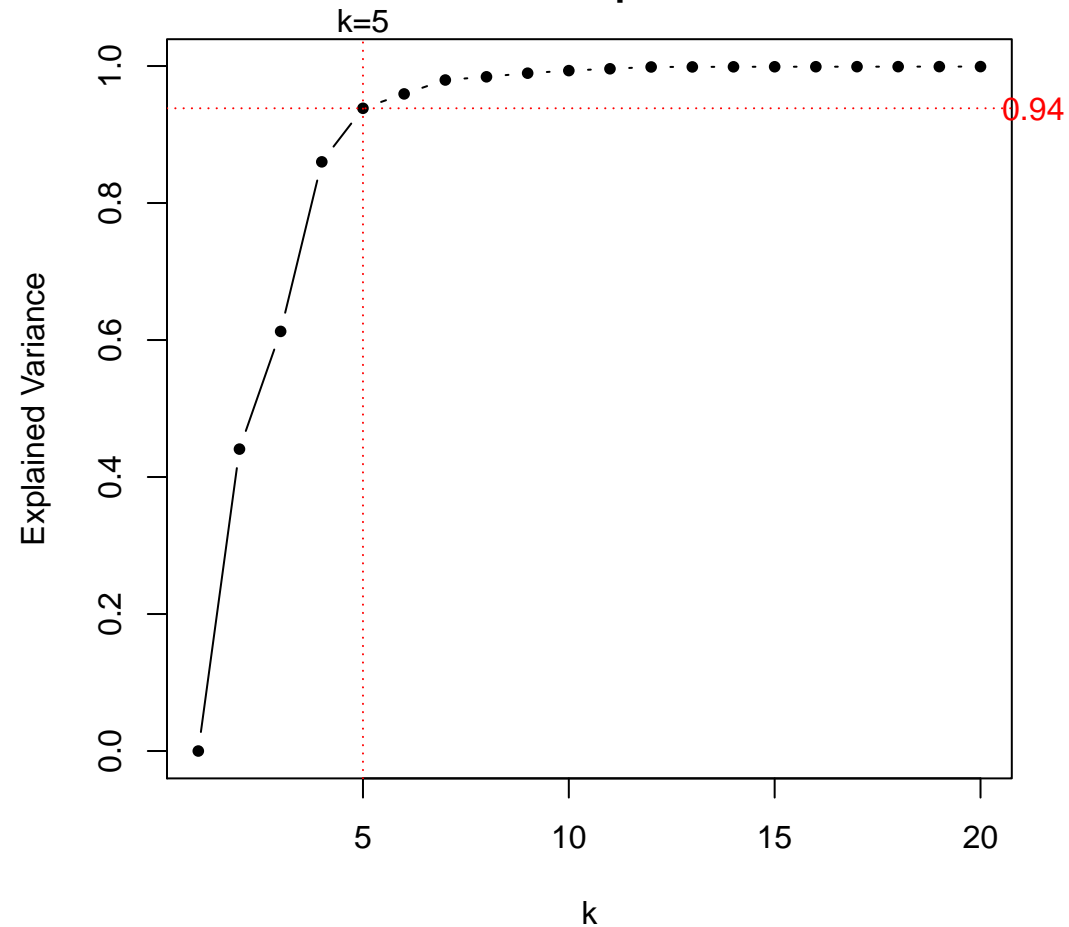


*A "good"  $k=7$  ( $EV=0.98$ ) is detected when the EV is no less than 0.95 and the increment of EV is no more than 0.01 for a bigger  $k$ .*

### Clusters of simulated data



### Elbow plot



*A "good"  $k=5$  ( $EV=0.94$ ) is detected when the EV is no less than 0.9 and the increment of EV is no more than 0.05 for a bigger  $k$ .*