

## Task 1:

### Q1:

1. Coordinates of the resulting centroids:
  - Centroid0 – (4.0, 6.3)
  - Centroid1 – (5.6, 3.6)
2. The two clusters:
  - Cluster0 – X1, X3, X10
  - Cluster1 – X2, X4, X5, X6, X7, X8, X9

### Q2:

1. Coordinates of the resulting centroids:
  - Centroid0 – (2.5, 6.5)
  - Centroid1 – (5.8, 3.9)
2. The two clusters:
  - Cluster0 – X1, X3
  - Cluster1 – X2, X4, X5, X6, X7, X8, X9, X10

### Q3:

1. Coordinates of the resulting centroids:
  - Centroid0 – (2.5, 5.0)
  - Centroid1 – (6.8, 4.0)
2. The two clusters:
  - Cluster0 – X1, X2, X3, X4
  - Cluster1 – X5, X6, X7, X8, X9, X10

### Q4:

1. Coordinates of the resulting centroids:
  - Centroid0 – (4.9, 3.6)
  - Centroid1 – (5.7, 6.3)
2. The two clusters:
  - Cluster0 – X1, X2, X4, X5, X6, X7, X8
  - Cluster1 – X3, X9, X10

Associated code can be found [here](#).