```
Could you please enter the number of points in cluster A?
9
Could you please enter the number of points in cluster B?
20
Could you please enter the number of points to test
6
The center of cluster A is the point with coordinates (77.465553,77.170006)
The center of cluster B is the point with coordinates (30.496002,32.748001)
--------------------------------------------------------

The point P_1 with coordinates(13.740000,69.809998) lies within cluster B
The point P_2 with coordinates(36.610001,56.520000) lies within cluster B
The point P_3 with coordinates(89.459999,28.730000) lies within cluster A
The point P_4 with coordinates(88.410004,78.860001) lies within cluster A
The point P_5 with coordinates(68.790001,72.930000) lies within cluster A
The point P_6 with coordinates(85.040001,36.939999) lies within cluster A
```

```
Could you please enter the number of points in cluster A?
100
Could you please enter the number of points in cluster B?
100
Could you please enter the number of points to test
20
The center of cluster A is the point with coordinates (80.380692,79.704720)
The center of cluster B is the point with coordinates (29.313393,30.034203)
----------------------------------------------------------

The point P_1 with coordinates(18.200001,70.720001) lies within cluster B
The point P_2 with coordinates(79.080002,72.360001) lies within cluster A
The point P_3 with coordinates(8.390000,47.459999) lies within cluster B
The point P_4 with coordinates(35.410000,7.590000) lies within cluster B
The point P_5 with coordinates(76.150002,23.850000) lies within cluster B
The point P_6 with coordinates(70.809998,10.470000) lies within cluster B
The point P_7 with coordinates(42.730000,65.769997) lies within cluster B
The point P_8 with coordinates(48.349998,85.839996) lies within cluster A
The point P_9 with coordinates(75.410004,84.849998) lies within cluster A
The point P_10 with coordinates(89.790001,12.190000) lies within cluster B
The point P_11 with coordinates(16.070000,40.799999) lies within cluster B
The point P_12 with coordinates(86.639999,67.050003) lies within cluster A
The point P_13 with coordinates(79.480003,78.250000) lies within cluster A
The point P_14 with coordinates(72.910004,20.820000) lies within cluster B
The point P_15 with coordinates(52.459999,77.760002) lies within cluster A
The point P_16 with coordinates(52.930000,50.900002) lies within cluster B
The point P_17 with coordinates(14.650000,74.370003) lies within cluster B
The point P_18 with coordinates(83.989998,89.120003) lies within cluster A
The point P_19 with coordinates(29.219999,35.509998) lies within cluster B
The point P_20 with coordinates(61.799999,70.660004) lies within cluster A
```