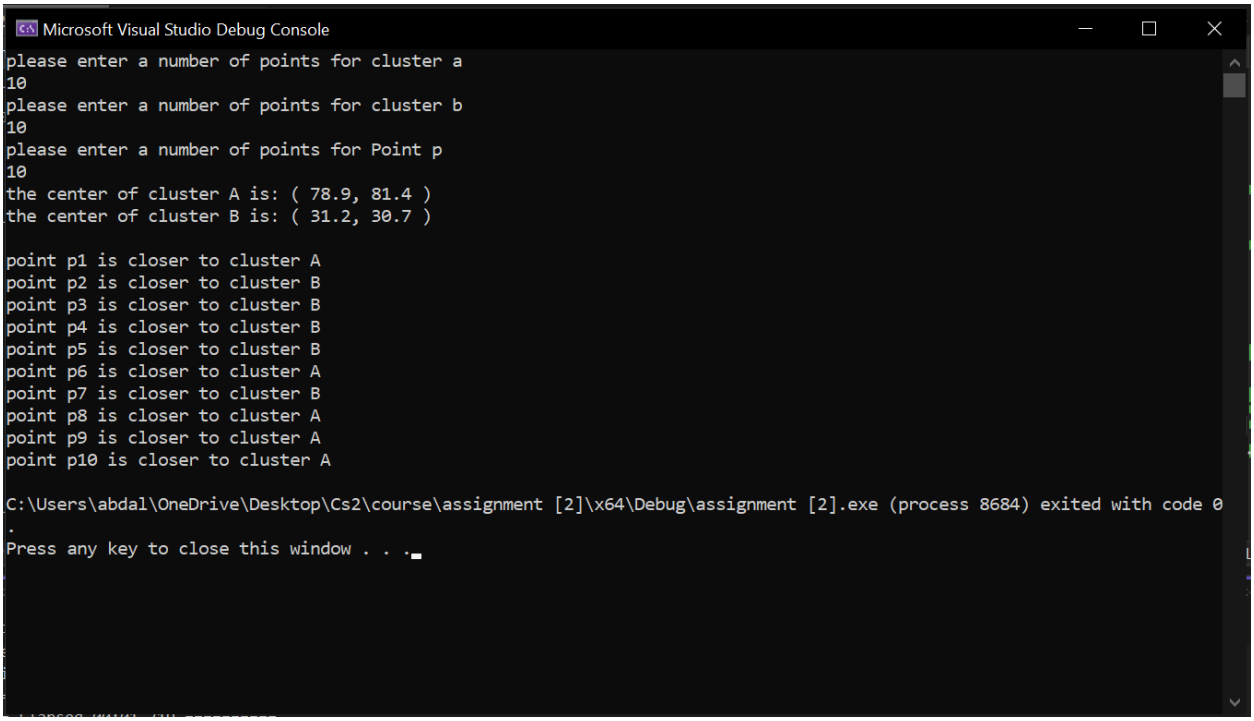
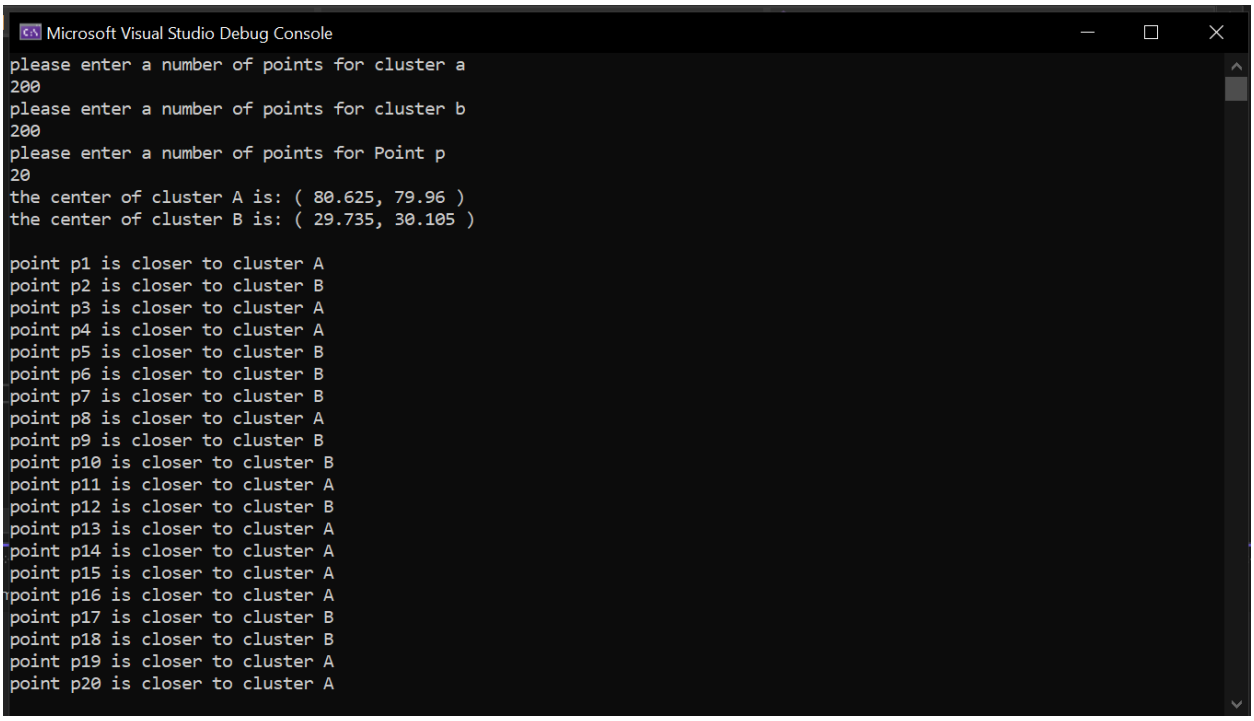

Microsoft Visual Studio Debug Console
please enter a number of points for cluster a
10
please enter a number of points for cluster b
10
please enter a number of points for Point p
10
the center of cluster A is: (78.9, 81.4)
the center of cluster B is: (31.2, 30.7)
point p1 is closer to cluster A
point p2 is closer to cluster B
point p3 is closer to cluster B
point p4 is closer to cluster B
point p5 is closer to cluster B
point p6 is closer to cluster A
point p7 is closer to cluster B
point p8 is closer to cluster A
point p9 is closer to cluster A
point p10 is closer to cluster A
C:\Users\abdal\OneDrive\Desktop\Cs2\course\assignment [2]\x64\Debug\assignment [2].exe (process 8684) exited with code 0
.
Press any key to close this window . . .


Microsoft Visual Studio Debug Console
please enter a number of points for cluster a
200
please enter a number of points for cluster b
200
please enter a number of points for Point p
20
the center of cluster A is: (80.625, 79.96)
the center of cluster B is: (29.735, 30.105)
point p1 is closer to cluster A
point p2 is closer to cluster B
point p3 is closer to cluster A
point p4 is closer to cluster A
point p5 is closer to cluster B
point p6 is closer to cluster B
point p7 is closer to cluster B
point p8 is closer to cluster A
point p9 is closer to cluster B
point p10 is closer to cluster B
point p11 is closer to cluster A
point p12 is closer to cluster B
point p13 is closer to cluster A
point p14 is closer to cluster A
point p15 is closer to cluster A
point p16 is closer to cluster A
point p17 is closer to cluster B
point p18 is closer to cluster B
point p19 is closer to cluster A
point p20 is closer to cluster A

1. I created the .h file
2. Declared and defined all function setters, getters and constructors.
3. I then created the .cpp file
4. I declared 3 pointer objects of class Point each pointing to an array of object point
5. Then I filled all of them with x and y points using the srand and rand function
    a. I face a small problem here because I called the srand a couple of times so the numbers outputted were the same
6. I then created the function centerPoints which take a pointer object and return and object containing the middle point
    a. This was dine by adding all the x points and then the y point and then divides the each by the number passes in the parameters which is the size of the array
7. After that I created the function closestCluster which take 3 pointers of objects and calls the function centerPoint then the distance between the values of the centerPoint and the values of a point in the array P to then compare the distances if what ever distance is close to a Point P then there is an output of which point is closest to which cluster