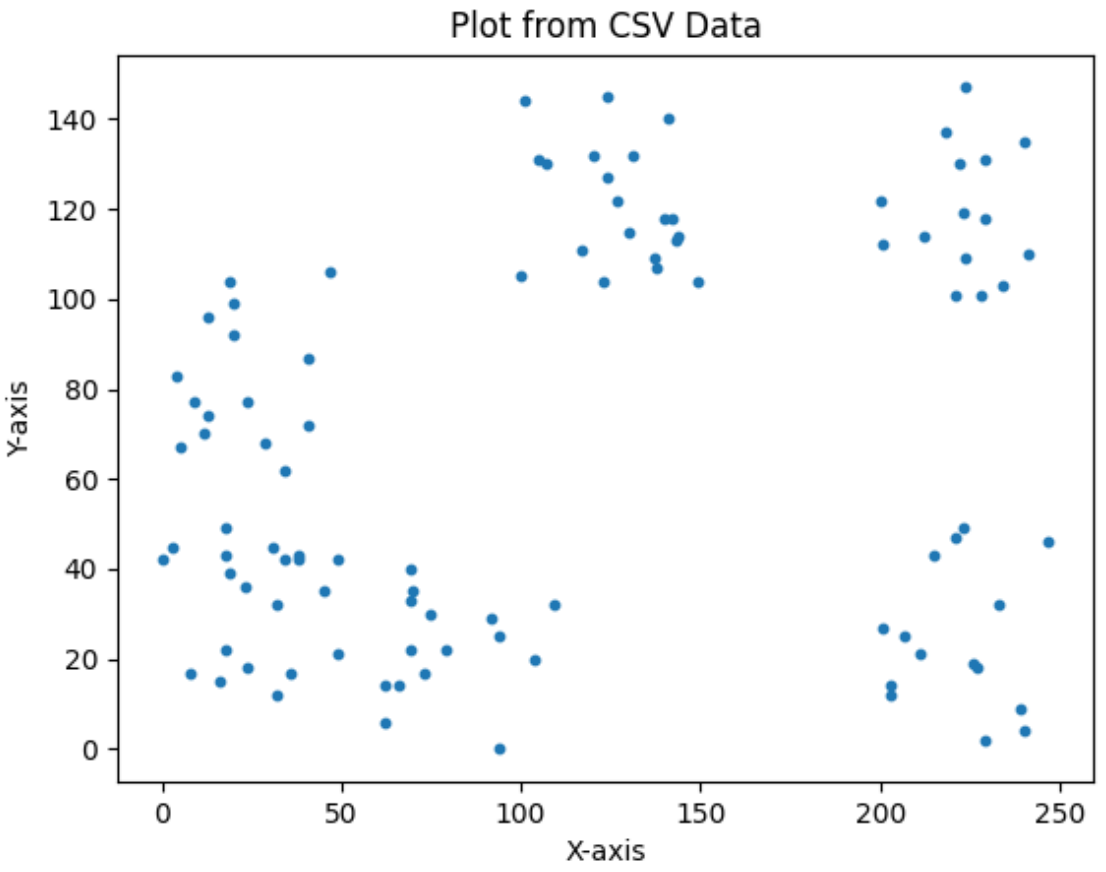
Plot from CSV Data
Y-axis
X-axis
0
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200
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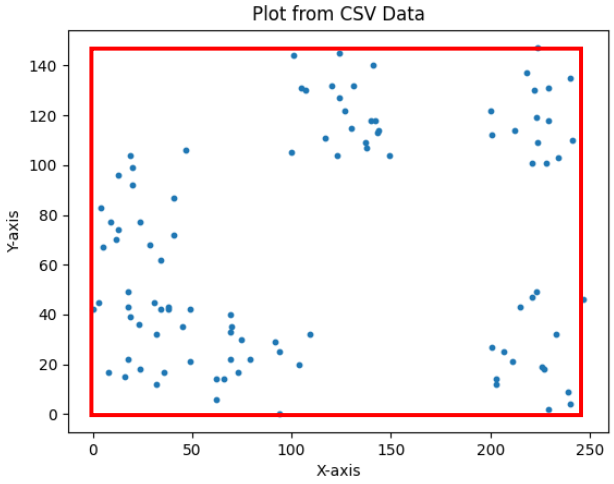
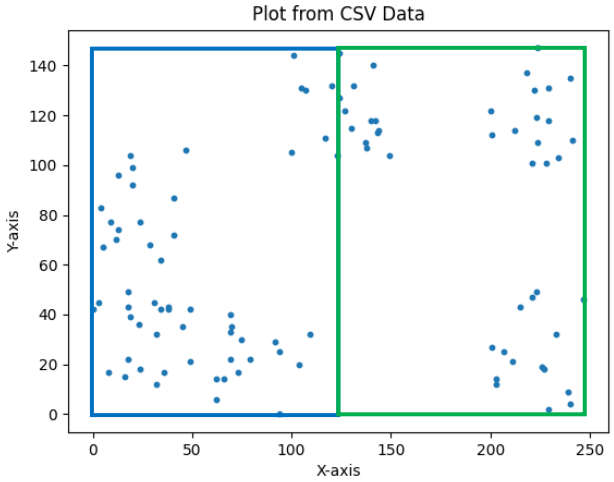
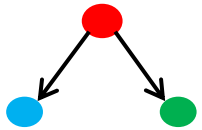


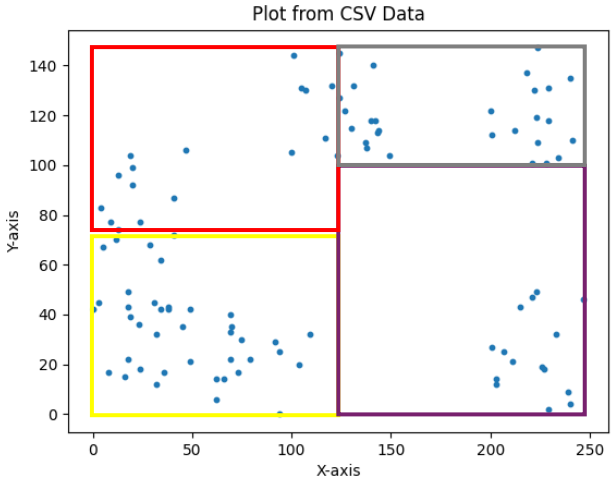
Root



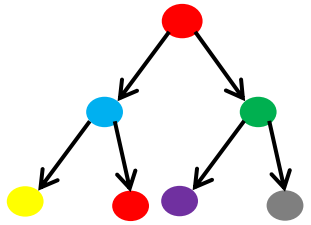
Root



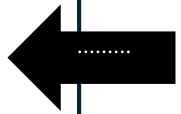
X-Axis Split



Root



Y-Axis Split



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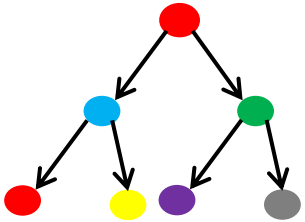
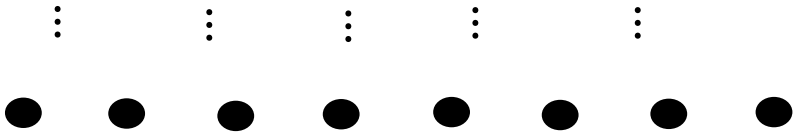
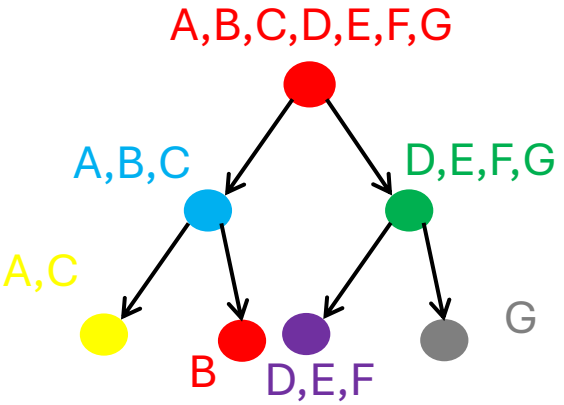
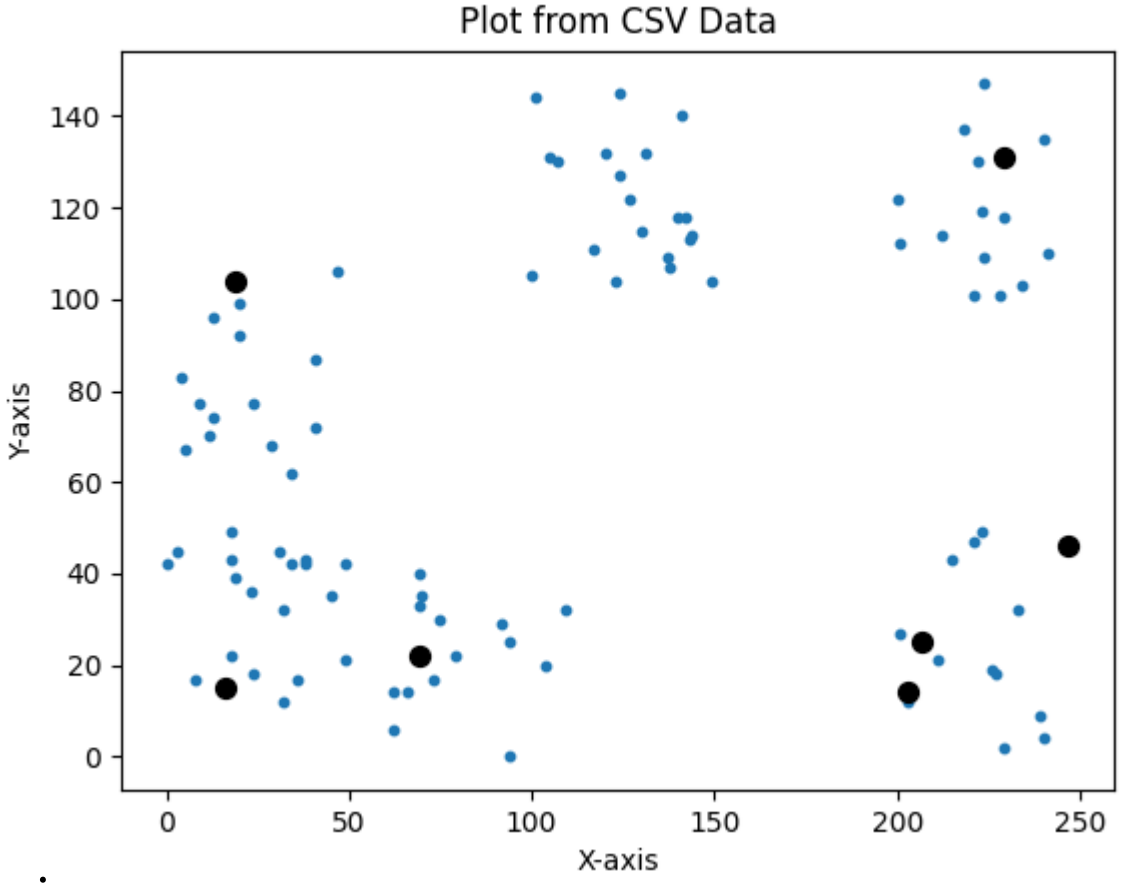


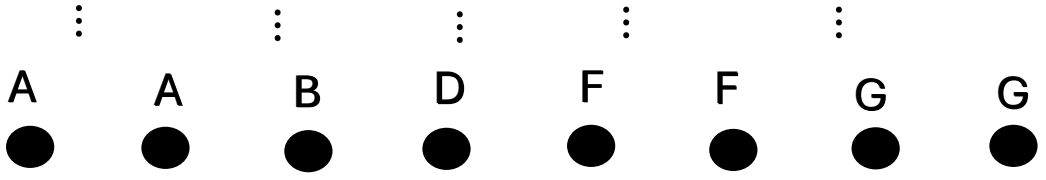


Leaf = Points

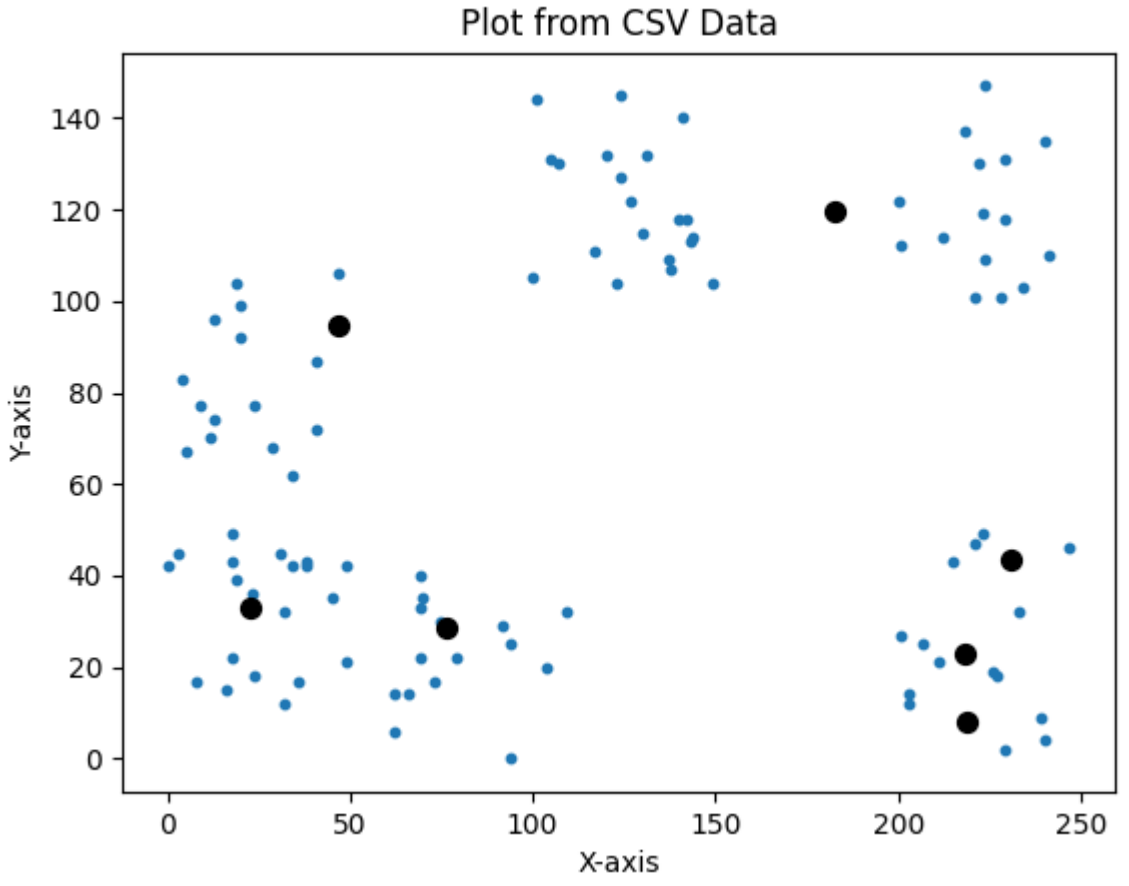
Centroids:
A = (16, 15) E = (247, 46)
B = (69, 22) F = (203, 14)
C =(19, 104) G = (229, 131)
D =(207, 25)







Then each point pulls its centroid near its position (its done with a weighted average)


Plot from CSV Data
Y-axis
X-axis
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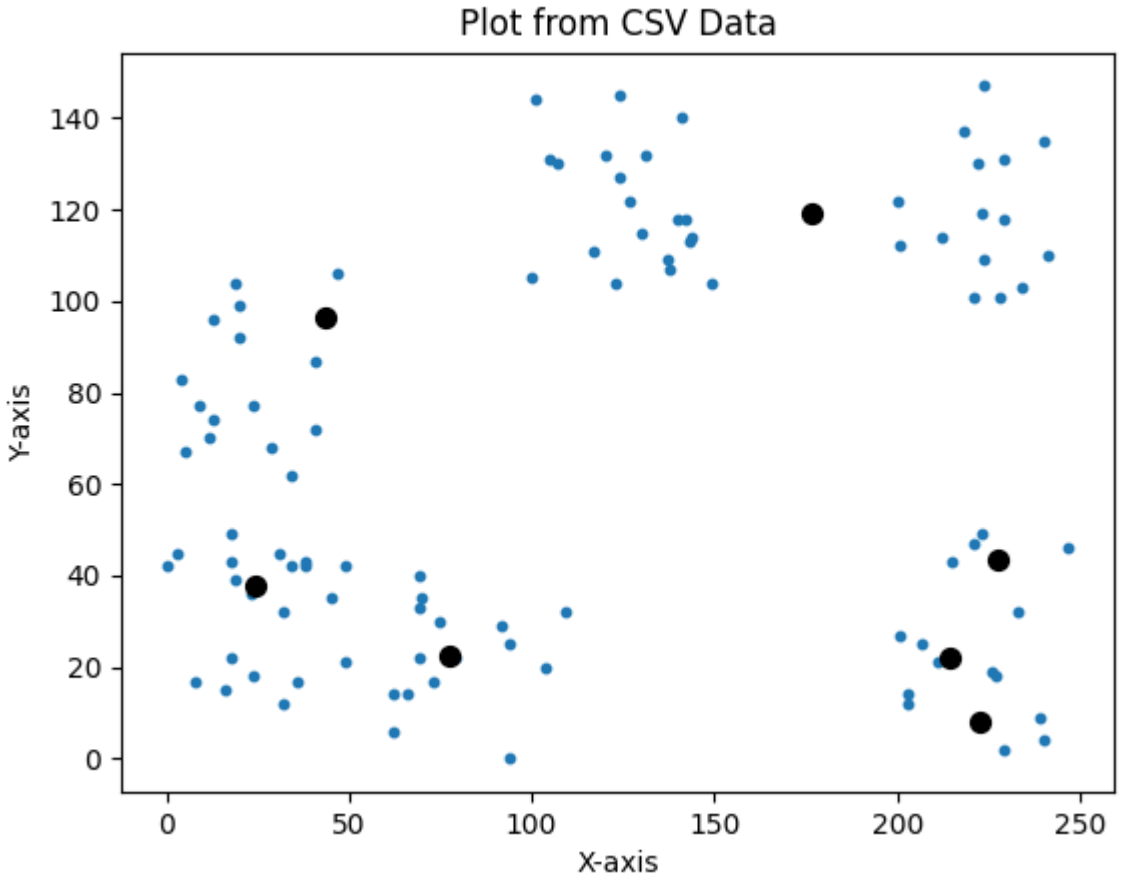
Plot from CSV Data
Y-axis
X-axis
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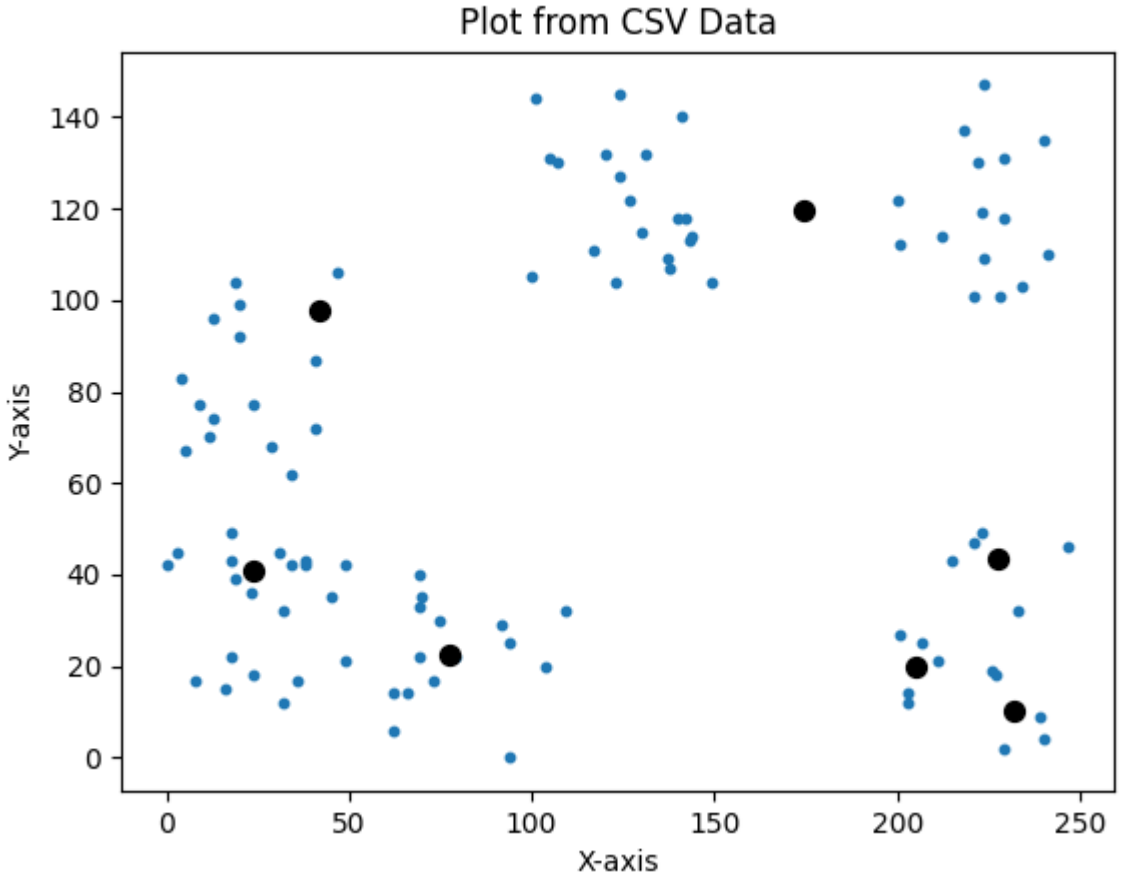
Plot from CSV Data
Y-axis
X-axis
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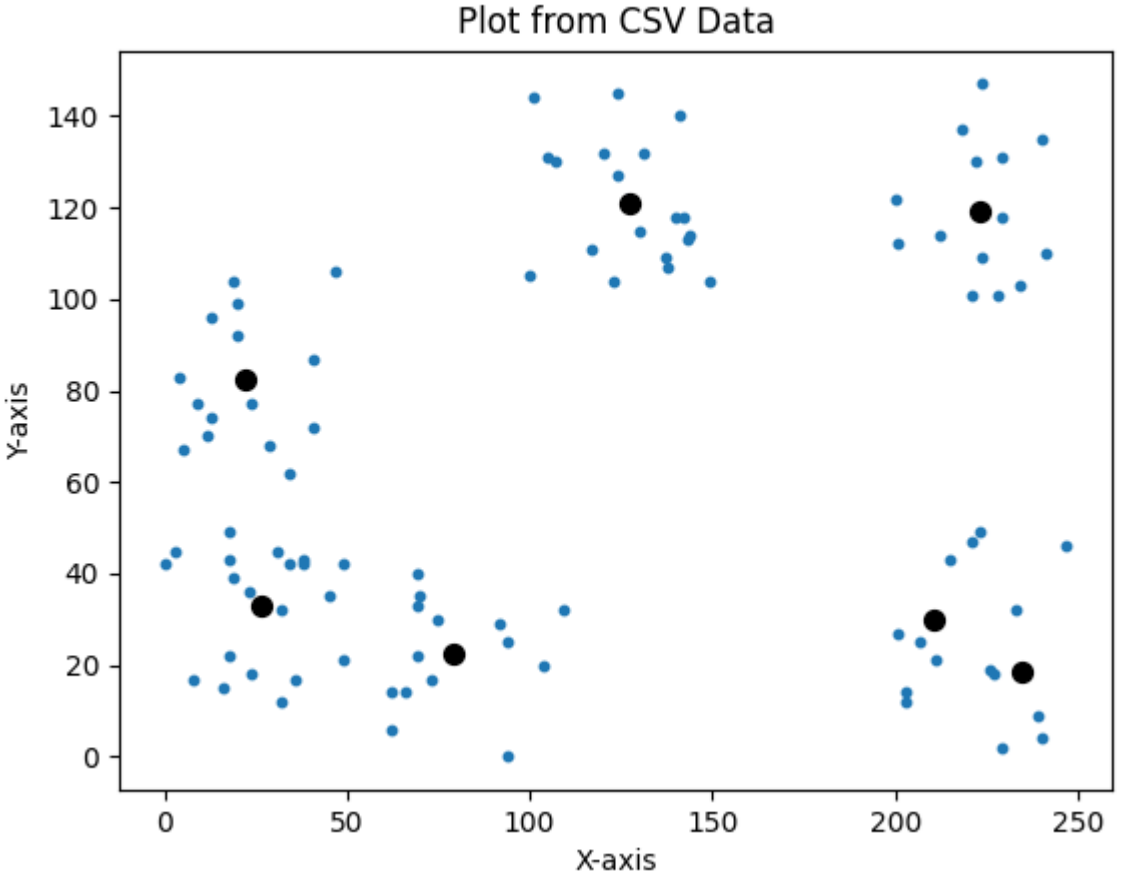
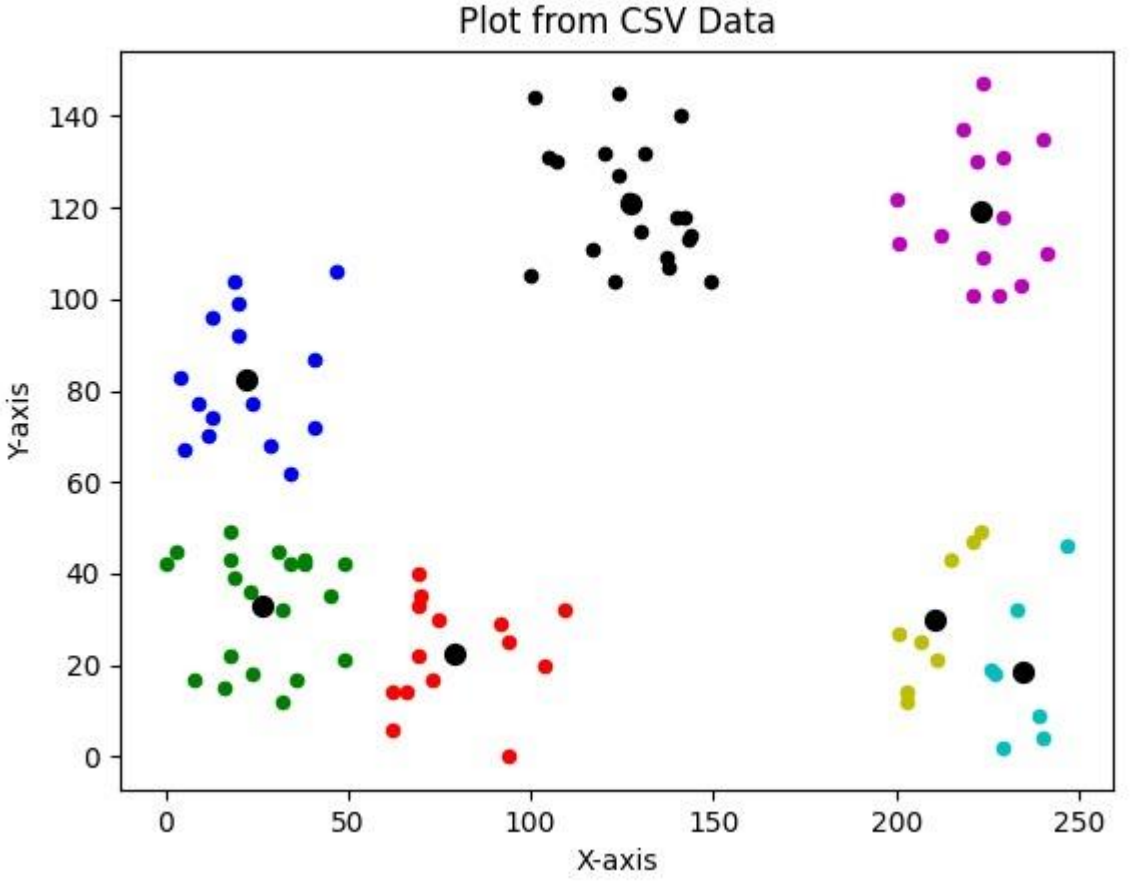
Convergence




Plot from CSV Data
Y-axis
X-axis
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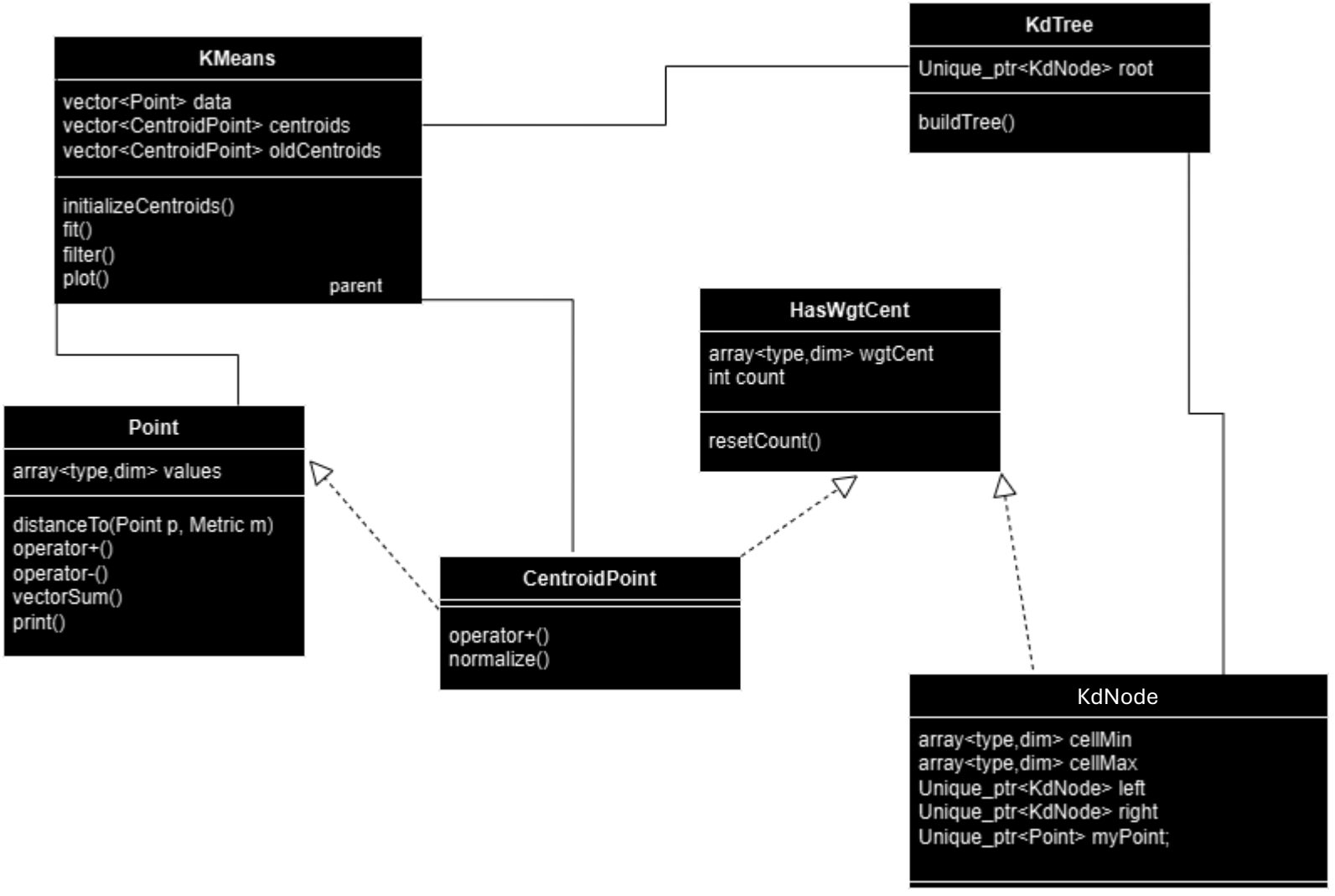
KMeans
vector<Point> data
vector<CentroidPoint> centroids
vector<CentroidPoint> oldCentroids
initializeCentroids()
fit()
filter()
plot()
parent
KdTree
Unique_ptr<KdNode> root
buildTree()
HasWgtCent
array<type,dim> wgtCent
int count
resetCount()
Point
array<type,dim> values
distanceTo(Point p, Metric m)
operator+()
operator-()
vectorSum()
print()
CentroidPoint
operator+()
normalize()
KdNode
array<type,dim> cellMin
array<type,dim> cellMax
Unique_ptr<KdNode> left
Unique_ptr<KdNode> right
Unique_ptr<Point> myPoint;