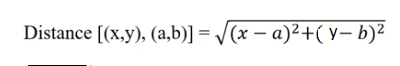
x = [2, 4, 6, 8, 10, 12, 14 , 16, 18, 20]

y = [20, 40, 60, 80, 100, 120, 140 , 160, 180, 200]

Step 1: Converting input x & y into points

| **x** | **y** | **Points (x,y)** | **Name** |
| --- | --- | --- | --- |
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Distance between (2,10) and (5,8) = square Root of ((2-5)^2 +(10-8)^2)= square Root of(9 +4)=3.60

Iteration 1

|  |  | **Cluster 1**  **()** | **Cluster 2**  **()** | **Cluster 3**  **()** |  |
| --- | --- | --- | --- | --- | --- |
|  | **Point** | **Distance Mean 1** | **Distance Mean 2** | **Distance Mean 3** | **Cluster Group** |
| **A1** |  |  |  |  |  |
| **A2** |  |  |  |  |  |
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Points of C1 =

Points of C2 =

Points of C3 =

New Cluster Points

Average of C1 = CN1 =

Average of C2 = CN2 =

= [average of x values , average of y values ]

Average of C3 = CN3 =

= [average of x values, average of y values]

Iteration 2

|  |  | **Cluster 1**  **(2,10)** | **Cluster 2**  **(6,6)** | **Cluster 3**  **(1.5,3.5)** |  |
| --- | --- | --- | --- | --- | --- |
|  | **Point** | **Distance Mean 1** | **Distance Mean 2** | **Distance Mean 3** | **Cluster Group** |
| **A1** |  |  |  |  |  |
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**Iteration 3**

|  |  | **Cluster 1** | **Cluster 2** | **Cluster 3** |  |
| --- | --- | --- | --- | --- | --- |
|  | **Point** | **Distance Mean 1** | **Distance Mean 2** | **Distance Mean 3** | **Cluster Group** |
| **A1** |  |  |  |  |  |
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