Two Circles Dataset

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Final Cluser Sizes  [1000 1000]
Final Number of iterations:  3
Final distance between new and old means:  3.1883239666729e-05
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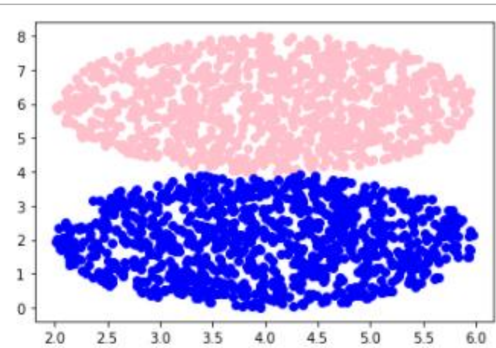

Iris Dataset:

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2: array([6.85      , 3.07368421, 5.74210526, 2.07105263])}
Final Cluser Sizes  [78 96 60]
Final Number of iterations:  5
Final distance between new and old means:  0.0
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In [730]:

```
for x in classes[0]:
    plt.scatter(x[0],x[1], color='pink')
for y in classes[1]:
    plt.scatter(y[0],y[1], color='blue')
for z in classes[2]:
    plt.scatter(z[0],z[1], color='green')
plt.show()
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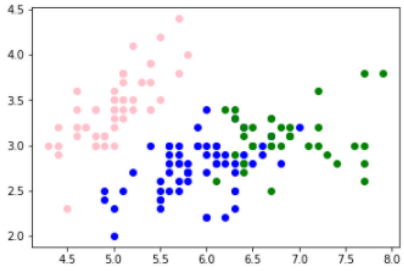

fourCircles dataset:

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Final Cluser Sizes  [ 374  259  327 1040]
Final Number of iterations:  20
Final distance between new and old means:  0.24632426314129602
```

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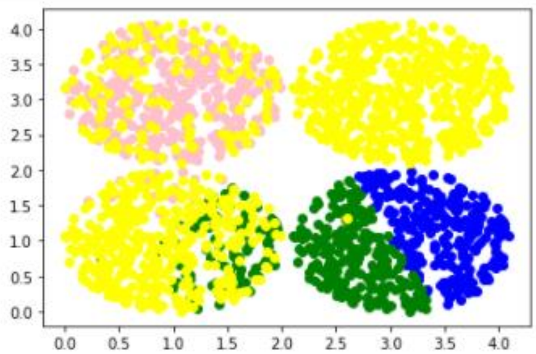
    plt.scatter(z[0],z[1], color='green')
for m in classes[3]:
    plt.scatter(m[0],m[1], color='yellow')
plt.show()
```



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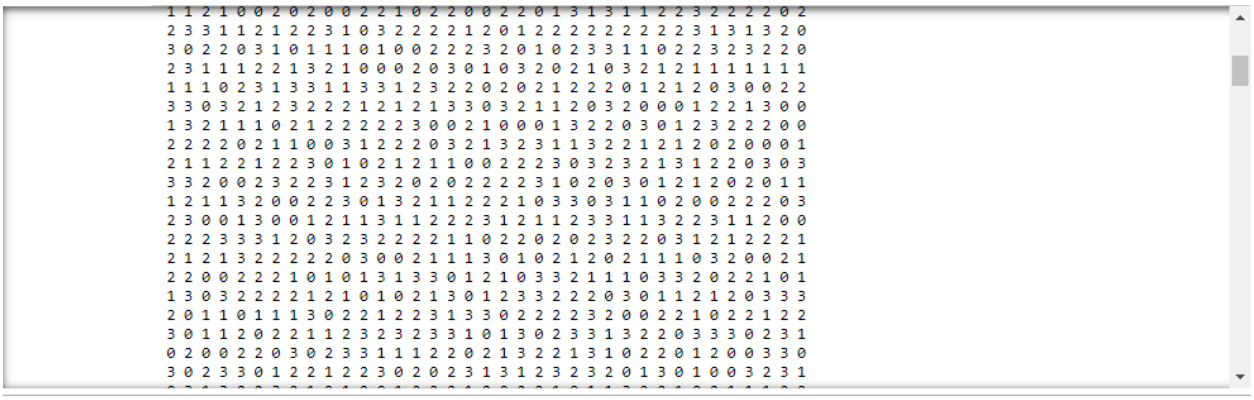
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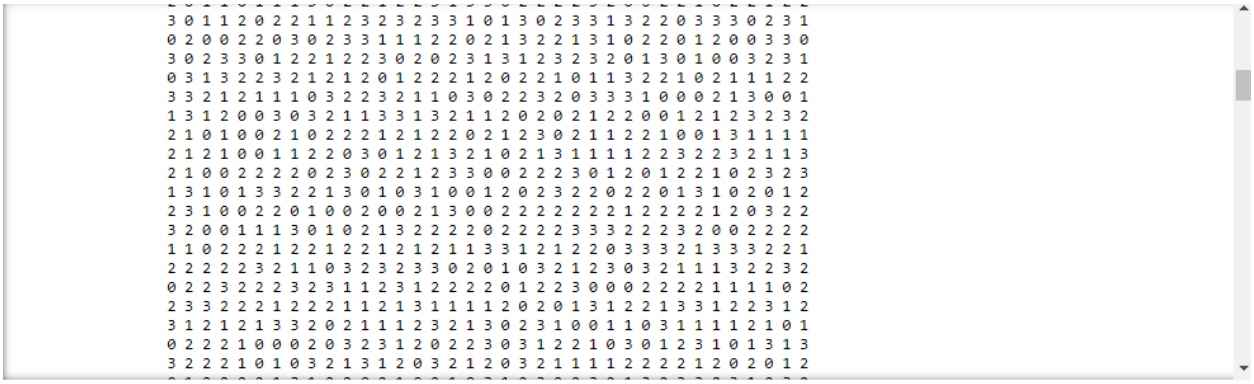
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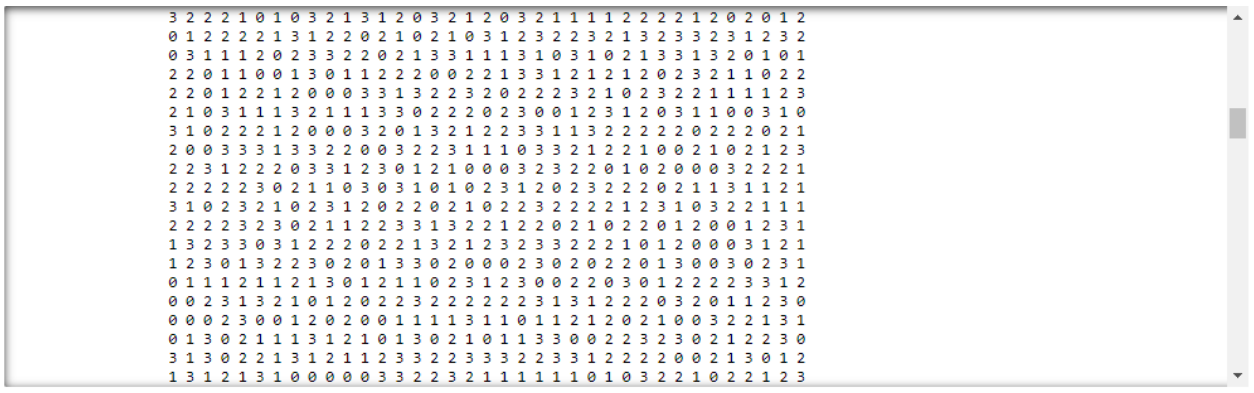
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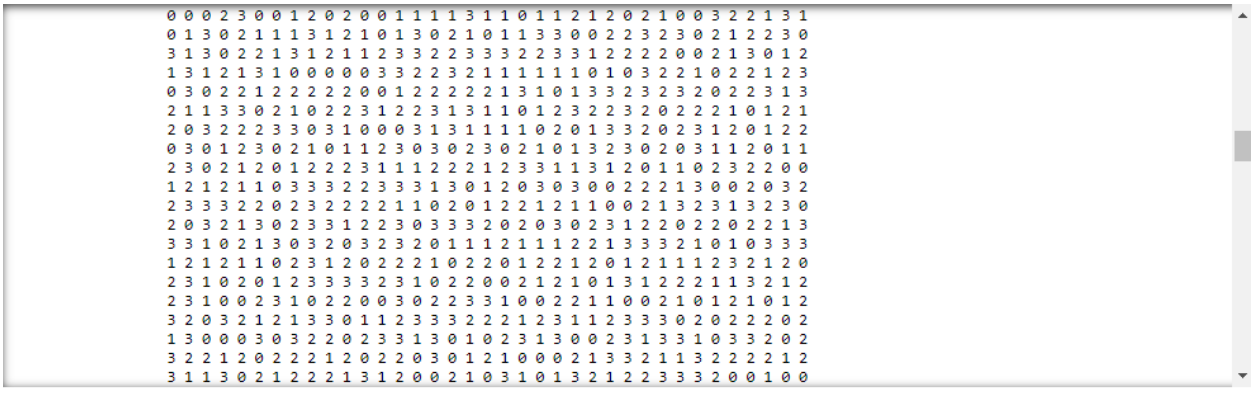
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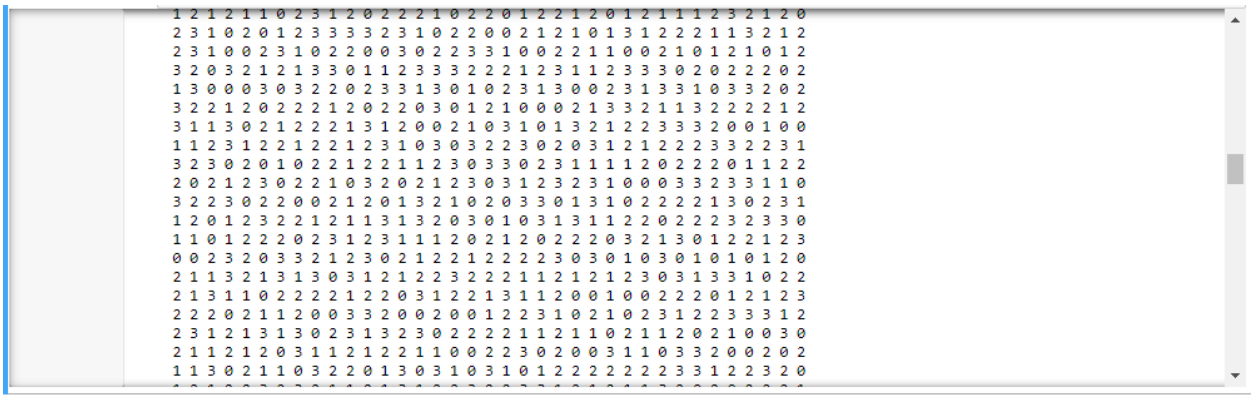

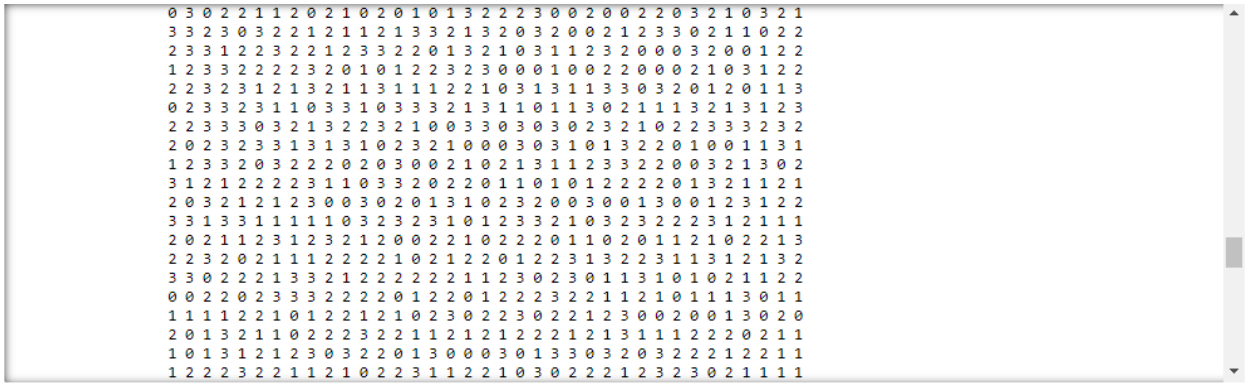
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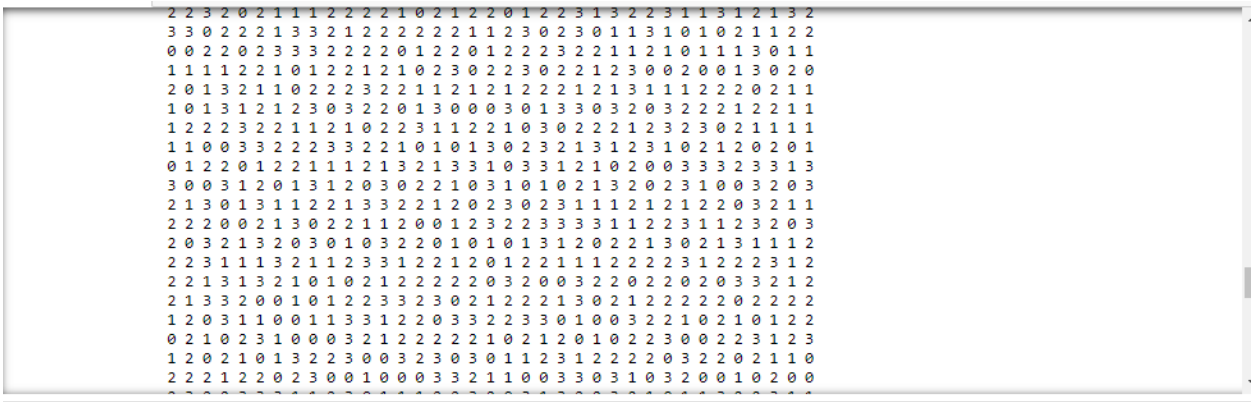
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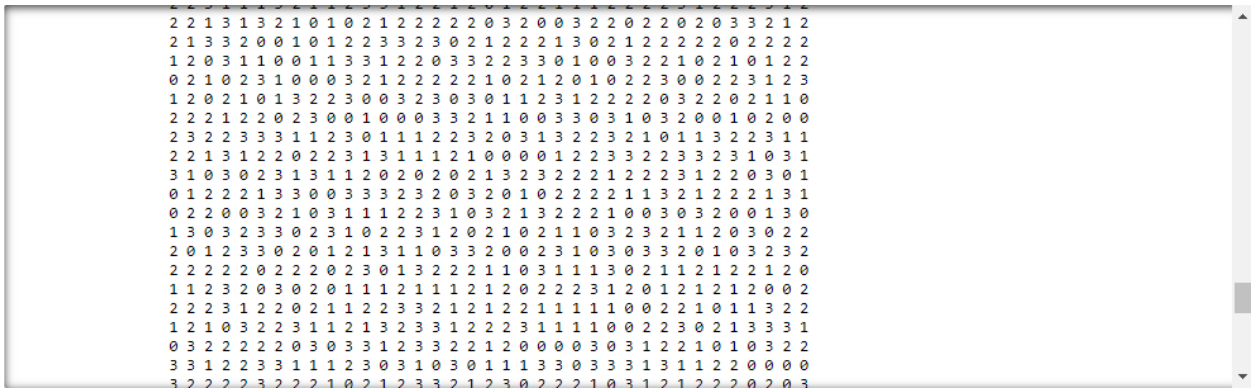
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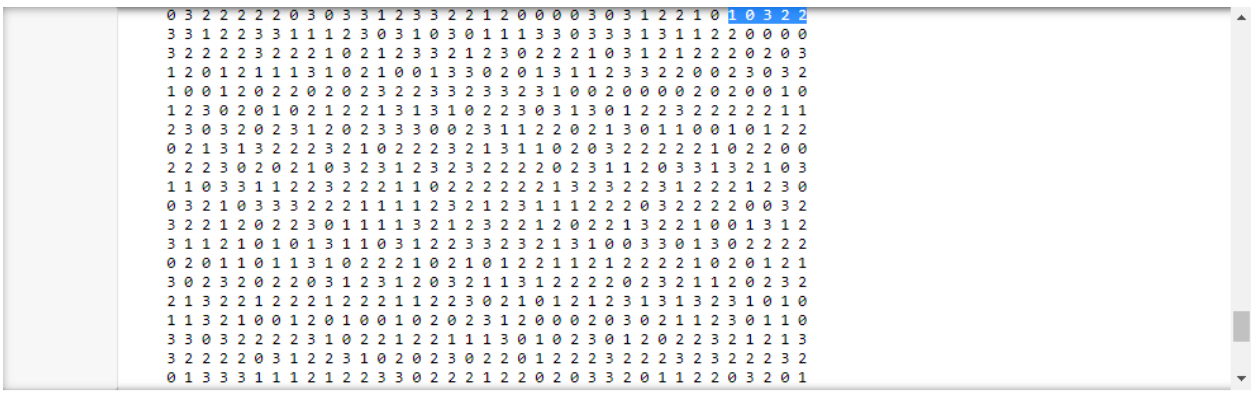
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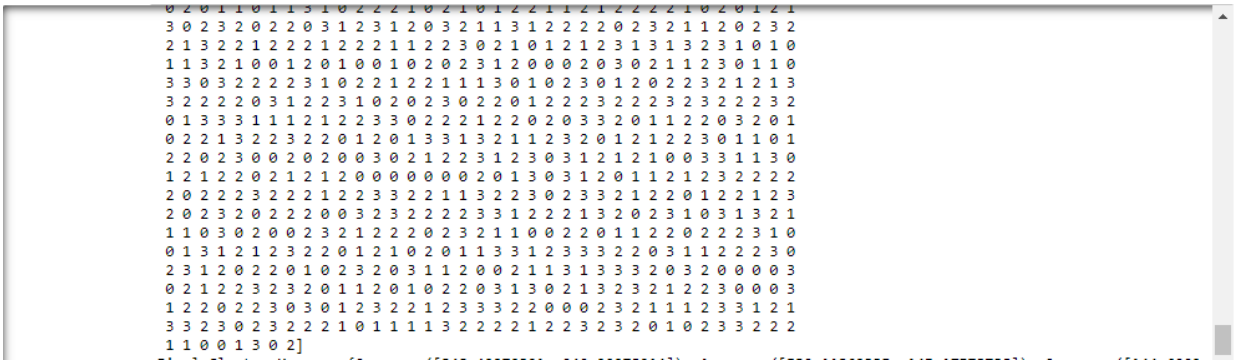

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Final distance between new and old means:  0.030752574656318386
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In [782]:

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for y in classes[1]:
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for z in classes[2]:
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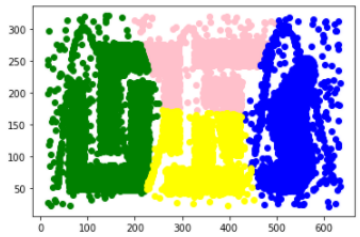

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0 1]
Final Cluster Means:  {0: array([2.72539423, 4.55012085]), 1: array([5.25784102, 4.63778627])}
Final Cluser Sizes  [1016  984]
Final Number of iterations:  8
Final distance between new and old means:  0.0003777915134484859
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plt.show()
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