Output of 2.1:

Cluser centers: [69.00427765 76.70986483] [70.62044459 24.38044043] [20.03717511 48.04890483]

Output of 2.2:

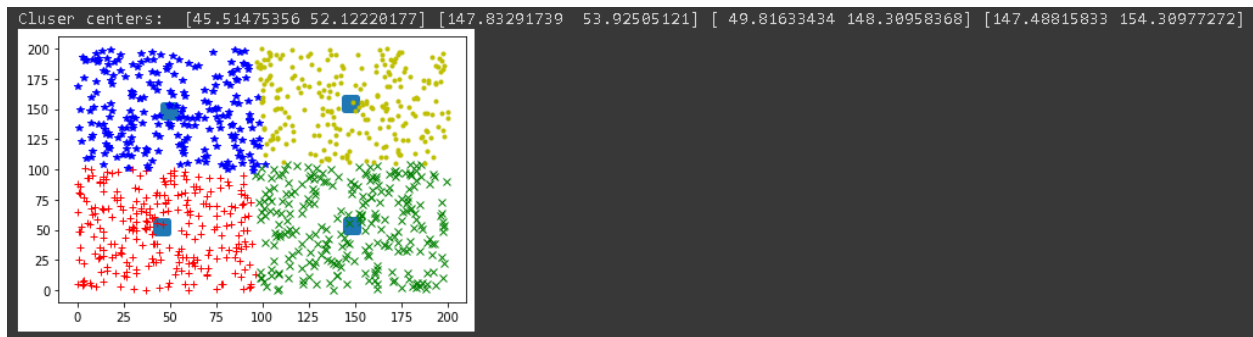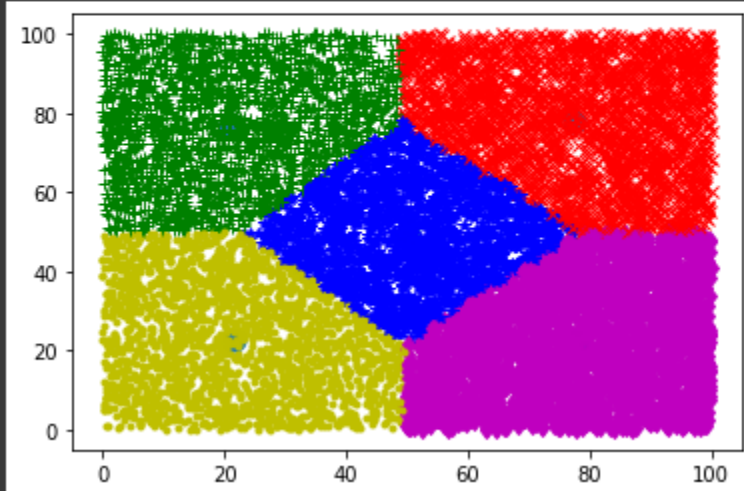Cluser centers: [45.51475356 52.12220177] [147.83291739 53.92505121] [49.81633434 148.30958368] [147.48815833 154.30977272]
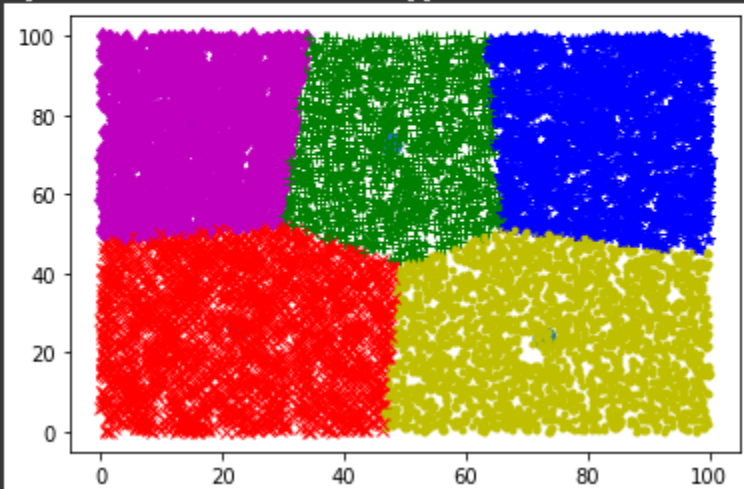
Output of 3.1:

```
Total Time: 0.2797881869999994
Cluster Centers: [[20.90032221 77.43738825]
 [77.46144035 78.05573277]
 [50.21003462 49.907883  ]
 [21.68256454 22.83899413]
 [77.65731668 22.0595674 ]]
```
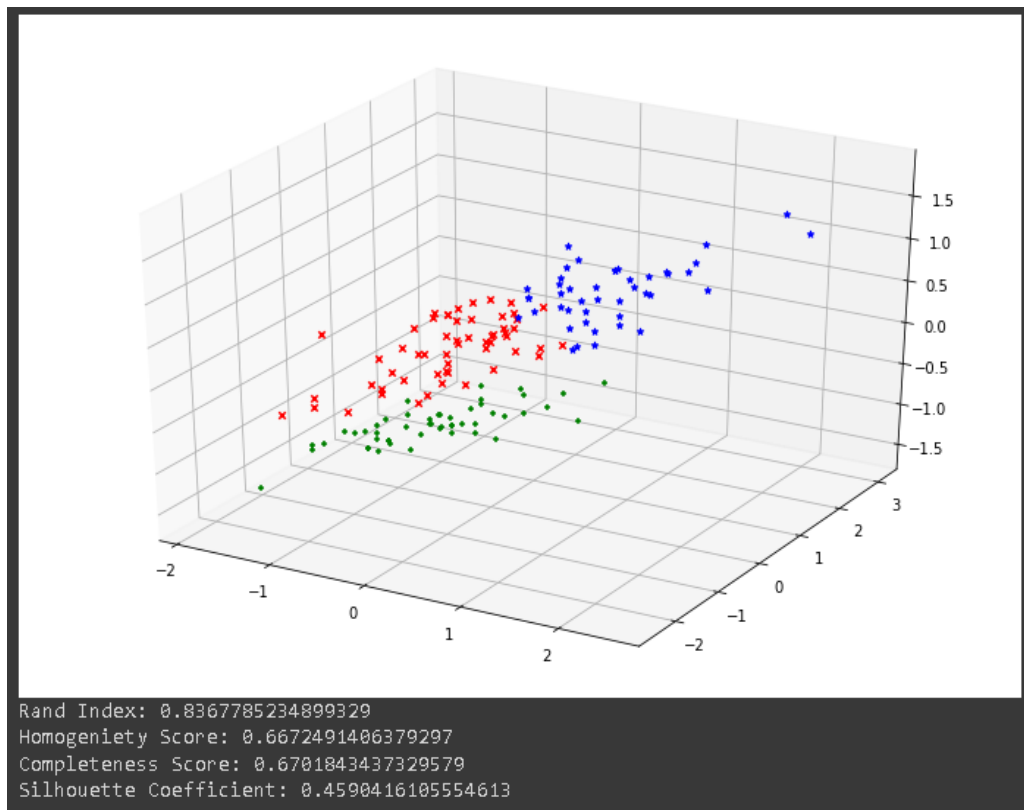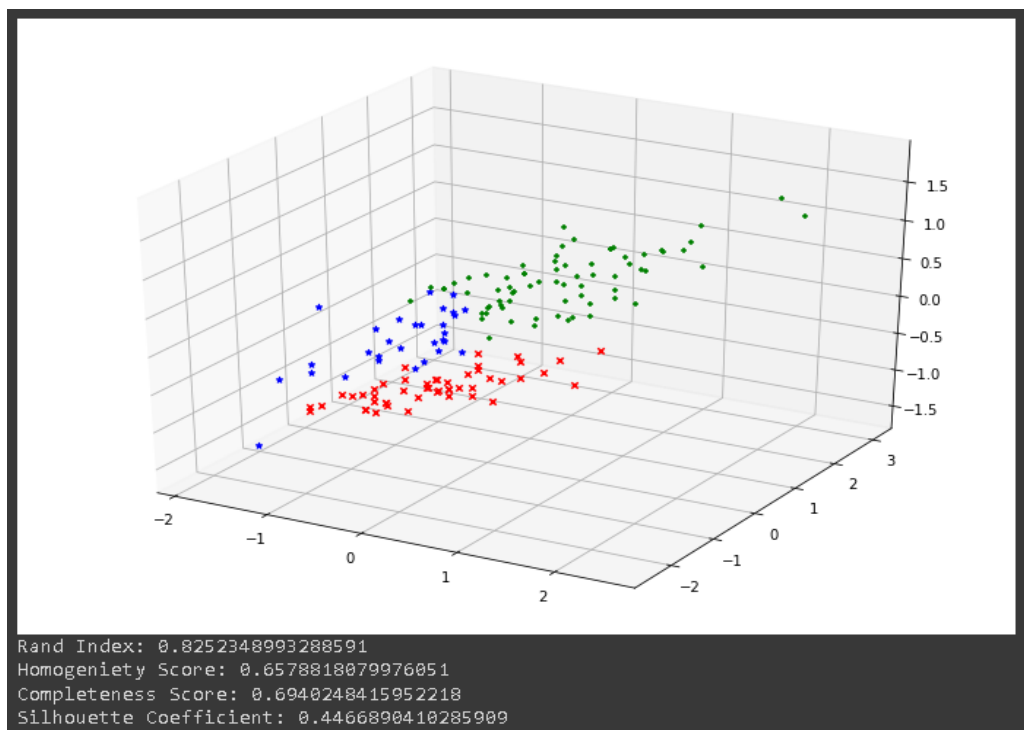

Output of 3.2:

```
Total Time:  0.17621111869812012
Cluster Centers: [[47.44173133 72.94277632]
 [22.72406834 26.38141786]
 [82.01939628 74.94021092]
 [72.70891198 23.66963518]
 [15.7526695  76.14111009]]
```

Output of 4.1:


```
Rand Index: 0.8367785234899329
Homogeniety Score: 0.6672491406379297
Completeness Score: 0.6701843437329579
Silhouette Coefficient: 0.4590416105554613
```

Output of 4.2:


```
Rand Index: 0.825234899328591
Homogeniety Score: 0.6578818079976051
Completeness Score: 0.6940248415952218
Silhouette Coefficient: 0.4466890410285909
```

Output of 8:

```
['mushroom cream sauce'] -> ['escalope']
['pasta'] -> ['escalope']
['herb & pepper'] -> ['ground beef']
['tomato sauce'] -> ['ground beef']
['whole wheat pasta'] -> ['olive oil']
['pasta'] -> ['shrimp']
['frozen vegetables', 'chocolate'] -> ['shrimp']
['spaghetti', 'frozen vegetables'] -> ['ground beef']
['mineral water', 'shrimp'] -> ['frozen vegetables']
['spaghetti', 'frozen vegetables'] -> ['olive oil']
['spaghetti', 'frozen vegetables'] -> ['shrimp']
['spaghetti', 'frozen vegetables'] -> ['tomatoes']
['spaghetti', 'grated cheese'] -> ['ground beef']
['herb & pepper', 'mineral water'] -> ['ground beef']
['spaghetti', 'herb & pepper'] -> ['ground beef']
['ground beef', 'shrimp'] -> ['spaghetti']
['spaghetti', 'milk'] -> ['olive oil']
['mineral water', 'soup'] -> ['olive oil']
['pancakes', 'spaghetti'] -> ['olive oil']
```