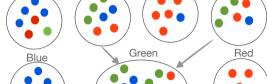
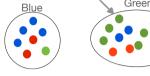


Assign each cluster the label that



Merse Clusters with the same (abel.





Confu ston

matrix

Actual

B(ul

Red

| 13 [ue | Green | Red |
|--------|-------|-----|
| 7 | 3 | |
| 1 | 6 | 0 |
| 7 | 4 } | 5 |

| Precision = | TP |
|-------------|---------|
| 1 1003 | TP+ 1=P |
| | TP |

Recall = IP TP+FN 2x precision x feach F1-SCOR = Precision + Recall

cluster Blue

Precision =
$$\frac{4}{4+3} = \frac{4}{7}$$

Recall = $\frac{4}{4+4} = \frac{1}{2}$
 $\frac{4}{7} = \frac{1}{2}$

Precision =
$$\frac{4}{4+3} = \frac{4}{7}$$

Recall = $\frac{4}{4+4} = \frac{5}{2}$

Recall = $\frac{5}{5+6} = \frac{5}{6}$

Recall = $\frac{5}{5+6} = \frac{5}{6}$

Fi-scarc = $\frac{5}{7+\frac{1}{2}} = \frac{8}{15}$

Fi-scarc = $\frac{5}{7+\frac{1}{2}} = \frac{5}{15}$

Cluster Green:

Plecision =
$$\frac{6}{67} = \frac{6}{13}$$

Recall = $\frac{6}{641} = \frac{6}{7}$
 $\frac{6}{13} + \frac{6}{7} = \frac{3}{5}$

Cluster Giren:

Piccision =
$$\frac{6}{677} = \frac{6}{13}$$

Recall = $\frac{6}{671} = \frac{6}{13}$

Fi-scale = $\frac{2}{13} + \frac{6}{7} = \frac{3}{3}$

Piccision = $\frac{4+5+6}{5+6}$

Recall = $\frac{1}{2} + \frac{1}{13} + \frac{6}{7}$

Recall = $\frac{1}{2} + \frac{1}{13} + \frac{6}{7}$
 $\frac{1}{13} + \frac{1}{7} = \frac{3}{5}$

Fi-scale = $\frac{1}{3} + \frac{10}{7} + \frac{3}{5} = \frac{3}{3} = \frac{3}{2} = 0.5739$