- Cluster 1 is predominantly Blue.
- Cluster 2 is predominantly Green.
- Cluster 3 is predominantly Red.
- Cluster 4 is predominantly Green.

- Blue Class: True count = 8 (4 in C1 + 2 in C2 + 1 in C3 + 1 in C4)
- Red Class: True count = 11 (2 in C1 + 2 in C2 + 5 in C3 + 2 in C4)
- Green Class: True count = 7 (1 in C1 + 3 in C2 + 0 in C3 + 3 in C4)

Confusion matrix for three classes (Blue, Red, Green):

		$Blue$	Red	$Actual$ $Green$
$Predicted$	$Blue$	4	2	1
	Red	1	5	0
	$Green$	3	4	6

Precision, Recall, and F-Score for Each Class:

For Blue:

- **Precision** = $\frac{4}{4+2+1} = \frac{4}{7} = 0.571$
- **Recall** = $\frac{4}{4+3+1} = \frac{4}{8} = 0.5$
- **F-Score** = $\frac{2 \times \text{Precision} \times \text{Recall}}{\text{Precision} + \text{Recall}} = \frac{8}{15} = 0.533$

For Red:

- **Precision** = $\frac{5}{1+5+0} = \frac{5}{6} = 0.833$
- **Recall** = $\frac{5}{2+5+4} = \frac{5}{11} = 0.455$
- **F-Score** = $\frac{2 \times \text{Precision} \times \text{Recall}}{\text{Precision} + \text{Recall}} = \frac{10}{17} = 0.588$

For Green:

- **Precision** = $\frac{6}{3+4+6} = \frac{6}{13} = 0.462$
- **Recall** = $\frac{6}{1+0+6} = \frac{6}{7} = 0.857$
- **F-Score** = $\frac{2 \times \text{Precision} \times \text{Recall}}{\text{Precision} + \text{Recall}} = \frac{3}{5} = 0.6$

Macro-Averaged Precision: 0.622

Macro-Averaged Recall: 0.604

Macro-Averaged F-score: 0.574