## <u>Performance Report of the SVM Model on the Augmented Dataset:</u>

Class	Precision	Recall	F1-Score	Support
0	0.96	0.98	0.97	299
1	0.98	0.96	0.97	301

- Precision for class 0 (no\_tumour) is 0.96, indicating that 96% of the images predicted as 'no tumour' were correctly classified.
- Precision for class 1 (tumour) is 0.98, indicating that 98% of the images predicted as 'tumour' were correctly classified.
- Recall for class 0 is 0.98, indicating that 98% of the actual "no\_tumour" images were correctly classified.
- Recall for class 1 is 0.95, indicating that 95% of the actual "tumour" images were correctly classified.
- The F1-score is the harmonic mean of precision and recall. It provides a balance between precision and recall. In this report:
  - F1-score for class 0 is 0.97, indicating a good balance between precision and recall for class 0.
  - F1-score for class 1 is also 0.97, indicating a good balance between precision and recall for class 1.
- Support is the number of actual occurrences of the class in the specified dataset. In this report, there are 299 samples for class 0 and 301 samples for class 1, which shows a good balanced dataset.
- Accuracy: Accuracy is the proportion of correctly classified samples (both true positives and true negatives) out of the total number of samples. In this report, the overall accuracy is around 96%, indicating that 96% of the samples were correctly classified.