SVM Classification

1. What is the overall percentage of **accuracy** for the Random Forest model?

   Answer → 0.68

2. What is the percentage of correct classification for "not purchased" instances compared to the total number of "**not purchased**" inputs in the test set?

   Answer → 0.99

3. What is the percentage of correct classification for "purchased" instances compared to the total number of "**purchased**" inputs in the test set?

   Answer → 0.14

4. What is the percentage of correct classification for "**not purchased**" instances compared to the sum of correctly classified "not purchased" and incorrectly classified "not purchased" instances in the test set?

   Answer → 0.67

5. What is the percentage of correct classification for "**purchased**" instances compared to the sum of correctly classified "purchased" and incorrectly classified "purchased" instances in the test set?

   Answer → 0.88

6. What is the overall performance of the "**not purchased**" classification?

   Answer → 0.80

7. What is the overall performance of the "**purchased**" classification?

   Answer → 0.25

8. What is the average performance of **precision** for correctly and incorrectly classified instances?

   Answer → 0.77

9. What is the average performance of **recall** for correctly and incorrectly classified instances?

   Answer → 0.57

10. What is the average performance of **F1 measure** for correctly and incorrectly classified instances?

    Answer → 0.52

11. What is the sum of the product of the precision rate (weight) of each class?

    Answer → 0.74

12. What is the sum of the product of the recall rate (weight) of each class?

Answer → 0.68

13. What is the sum of the proportion rate (weight) of each class?

    Answer → 0.59

14. What is the total number of test data instances classified as "not purchased"?

    Answer → 85

15. What is the total number of test data instances classified as "purchased"?

    Answer → 49

16. What is the total performance of the model on the entire test data (overall performance)?

    Answer → 134

17. What is the total average performance of the model on the test data?

    Answer → 134

18. What is the total proportion rate for all instances in the test data?

    Answer → 134

```
print(clf_report)
```

```
              precision    recall  f1-score   support

           0       0.67      0.99      0.80        85
           1       0.88      0.14      0.25        49

    accuracy                           0.68       134
   macro avg       0.77      0.57      0.52       134
weighted avg       0.74      0.68      0.59       134
```