Introduction:

- Briefly introduce biometric pattern recognition.
- Explain the chosen biometric modality (e.g., face, fingerprint, iris).
- State the importance of pattern recognition in biometrics.
- Highlight the specific research topic you'll be focusing on within that modality (e.g., novel feature extraction methods for iris recognition).

Conclusion:

- Briefly summarize the key findings of your literature review.
- Reiterate the significance of the chosen research topic within biometrics.
- Mention any limitations of the reviewed studies and their potential implications.
- Avoid introducing new information; focus on closing the discussion.
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Literature Review (20 Marks):

Data Collection:

- Discuss the types of data used in the reviewed studies (e.g., public datasets, custom-collected data).
- Analyze the data acquisition methods and potential biases/limitations.
- Evaluate the data pre-processing techniques employed.
- Feature Extraction/Selection:

- Describe the different feature extraction/selection methods used in the reviewed studies.
- Compare and contrast the effectiveness of different approaches.
- Discuss the impact of feature selection on recognition accuracy and computational cost.
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Classifier/s:

- Describe the various classifier algorithms employed in the reviewed studies.
- Compare and contrast the performance of different classifiers (e.g., accuracy, robustness, computational efficiency).
- Analyze the impact of training data size and quality on classifier performance.

System Evaluation:

- Discuss the different evaluation metrics used in the reviewed studies (e.g., accuracy, precision, recall, AUC).
- Analyze the limitations of each metric and the importance of considering them in conjunction.
- Evaluate the generalizability of the reported results to different settings and scenarios.

Discussion (10 Marks):

- Analyze how data collection, feature extraction/selection, and classifier choice impact the overall system performance.
- Discuss the trade-offs between accuracy, robustness, and computational efficiency in different scenarios.
- Identify emerging trends and challenges in the chosen research area of biometric pattern recognition.
- Suggest potential directions for future research based on the gaps identified in the reviewed literature.