

Task 1: Model Training and Evaluation

1. Implement a supervised machine learning model to predict the survival of Titanic passengers.
2. Use the following machine learning models for comparison:
 - Logistic Regression
 - Random Forest
 - Neural Network (using TensorFlow or PyTorch)
3. Split the dataset into training and test sets (e.g., 80-20 split) and train each model.
4. Evaluate model performance using appropriate metrics such as accuracy, precision, recall, and F1-score.
5. Provide a comparison of model performance and explain your findings.

Deliverables:

- Python code for model training and evaluation.
- Summary of performance metrics.

Submission Guidelines:

- Submit your work as a GitHub repository or a zip file containing all scripts, notebooks, and documentation.
- Include a [README.md](#) file explaining how to run your code and any dependencies required.
- Ensure your code is well-structured, commented, and follows best practices.