1.Explain how you can implement ML in a real world application.

Ans-

- **1.Define the Problem** Understand what specific task or question you want a computer to learn or solve. For example, predicting if an email is spam or not.
- **2.Collect Data** Gather information or examples related to the problem. In the email example, you'd collect a set of emails labeled as either spam or not spam.
- **3. Clean and Prepare Data -** Make sure the data is in good shape. Remove any irrelevant or messy parts, like missing information or errors.
- **4. Create Features -** Decide what aspects of the data are relevant for the problem. For emails, features might include the number of words or the presence of specific keywords.
- **5. Choose a Model-** Pick a method (model) for the computer to learn from the data. It could be a simple rule-based system or a more complex algorithm like a decision tree.
- **6. Train the Model -** Train the computer by showing it examples from the data. The computer learns patterns and relationships between features and outcomes (spam or not spam).
- **7. Evaluate the Model -** Test how well the computer has learned. Use a separate set of examples (data) that it hasn't seen before to see if it can make accurate predictions.
- **8. Iterate and Improve-** If the computer doesn't perform well, tweak the model or give it more examples to learn from. This process is called "training" the model.
- **9 . Deploy the Model -** Once you're satisfied with how well the computer can make predictions, you can use it to automatically classify new, unseen emails as spam or not spam.