

## Resources

Here are some excellent courses to consider as you delve into Machine Learning. Select one that aligns with your interests, and ensure you thoroughly complete all the topics. Take advantage of this opportunity for growth—it's set to be a rewarding experience.

### Beginner Course / Easiest to follow:

- [Regression and Classification by Andrew Ng - Coursera](#)

### Intermediate Courses (Covers the Maths in depth)

Stanford CS229:

- [YouTube Video Lectures](#)

### Additional Resources (for reference):

- [StatQuest - Machine Learning on YouTube](#)

## Description

Once you're done learning everything before logistic regression

See the linear regression task in the link below

### [TASK](#)

The dataset is given, and the task description is in task.md of the linear regression folder

## Machine Learning Basics - Assignment Instructions

### Submission Format

- Implement all tasks in a Jupyter Notebook (.ipynb) file
- Download and upload the completed notebook on GitHub as well as Google dRIVE

### Implementation Requirements

#### Core Requirement: Build from Scratch

- Implement all models from scratch - write your own training algorithms

- Do not use pre-built model libraries (e.g., scikit-learn's models, TensorFlow/PyTorch built-in models)

### **Allowed Libraries**

You may use libraries for data handling and visualization:

- Matrix operations: NumPy or similar
- Data processing: Pandas or similar
- Visualization: Matplotlib or similar

**The key distinction: use libraries for *computation* but not for *model implementation***

### **Required Outputs**

For All Models

- Display training accuracy for each epoch
- Display testing accuracy for each epoch

### **Linear Regression Specific**

- Include a plot of cost function values across epochs
- Report accuracy metrics after each epoch

### **Logistic Regression Specific**

- Use accuracy as the evaluation metric