

Assignment

Import Packages

```
In [7]: import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
```

Read the csv file

```
In [ ]:
```

Define x_train and y_train

```
In [ ]:
```

Display x_train and y_train

```
In [ ]:
```

Display the shape of x_train and y_train

```
In [ ]:
```

Display the count of x_train and y_train

```
In [ ]:
```

Display corresponding x_train and y_train

```
In [ ]:
```

Plot the data in 2D Scatter plot with title, xlabel, and ylabel



```
In [8]: # Plot the data points
# plt.scatter()
# Set the title and labels
```

Take the input from the user for w parameters(Assume $b = 0$)

```
In [ ]:
```

Generate and plot 10 lines for different w and b along with the datapoints



```
In [9]: # Plot the data points

# Generate and plot 10 lines for different models along with the datapoints
# Set the title and labels

# Add a legend to the plot

# Display the plot
```

Define the compute_cost function

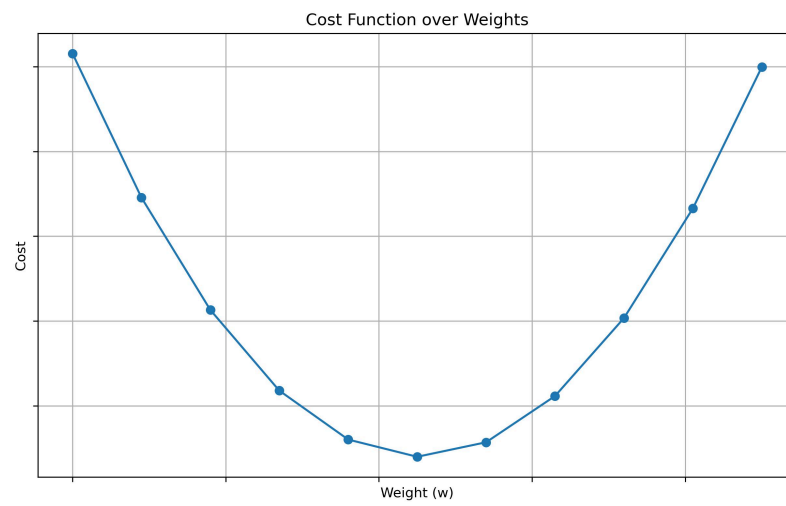
```
In [10]: # Define the compute_cost function
def compute_cost(x, y, w, b):

    return
```

Compute cost and predictions for each weight

```
In [11]: # Compute cost and predictions for each weight
```

Plot the prediction data in 2D Scatter plot with title, xlabel, and ylabel



```
In [12]: # Plotting the Cost against Weights
# plt.figure(figsize=(10, 6))
# plt.plot()
# Set the title and labels
```