



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
ASPproved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

23AMB201 - MACHINE LEARNING

II YEAR IV SEM

UNIT II – SUPERVISED LEARNING ALGORITHMS

**TOPIC 10 – Implement Stock price prediction based on Scikit
learn**

Redesigning Common Mind & Business Towards Excellence



Build an Entrepreneurial Mindset Through Our Design Thinking FrameWork



Stock Prize Prediction



```
[ ] import numpy as np
import pandas as pd
import yfinance as yf
from sklearn.linear_model import LinearRegression
```

```
# Load stock data
data = yf.download('AAPL', start='2020-01-01', end='2024-01-01')

data['Days'] = (data.index - data.index.min()).days # Convert dates to numerical values
X = data[['Days']]
y = data['Close']
```



Stock Prize Prediction



```
# Train model
model = LinearRegression()
model.fit(X, y)
future_price = model.predict([[X['Days'].max() + 30]]) # Access 'Days' column directly
# Extract the numerical value from the numpy array
print(f'Predicted Price after 30 days: ${future_price[0][0]:.2f}')
```



```
[*****100%*****] 1 of 1 completed Predicted Price after 30 days: $191.44
```