

```
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
from sklearn.metrics import mean_squared_error, r2_score
```

```
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

```
data = pd.read_csv('/content/drive/MyDrive/archive
(5)/ecommerce_product_dataset.csv')
```

```
x = data[['Sales', 'ProductID']]
y = data['Price']
```

```
LR = LinearRegression()
```

```
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```
data = pd.read_csv('/content/drive/MyDrive/archive
(5)/ecommerce_product_dataset.csv')
```

```
# Extract features and target variable as dataframes, not lists
```

```
x = data[['Sales', 'ProductID']]
y = data['Price']
```

```
LR = LinearRegression()
```

```
LR.fit(x,y)
```

```
LinearRegression()
```

```
# prompt: create a code for above dataset whereas predicting price
using sales and productid as per user input
```

```
def predict_price(sales, product_id):
    """
```

```
    Predicts the price of a product based on its sales and product ID.
```

```
    Args:
```

```
        sales: The number of sales for the product.
```

```
        product_id: The ID of the product.
```

```
    Returns:
```

```
        The predicted price of the product.
```

```
    """
```

```
# Create a dataframe with the user input
user_input = pd.DataFrame([[sales, product_id]], columns=['Sales',
'ProductID'])

# Predict the price using the linear regression model
predicted_price = LR.predict(user_input)[0]

return predicted_price

# Get user input for sales and product ID
sales = float(input("Enter the number of sales: "))
product_id = int(input("Enter the product ID: "))

# Predict the price
predicted_price = predict_price(sales, product_id)

# Print the predicted price
print("Predicted price:", predicted_price)

Enter the number of sales: 466
Enter the product ID: 1
Predicted price: 249.1478394939222
```