

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

Mounted at /content/gdrive

```
%cd "/content/gdrive/MyDrive"
```

/content/gdrive/MyDrive

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import random
from sklearn.model_selection import train_test_split
from sklearn.linear_model import SGDRegressor
from sklearn.metrics import mean_squared_error
```

```
data = pd.read_csv('Valhalla23.csv')
semilla = 6390
```

```
# Separacion de datos: entrenamiento (40%), validación (40%), y prueba (20%)
train, temp = train_test_split(data, test_size=0.6, random_state=semilla)
valid, test = train_test_split(temp, test_size=0.33, random_state=semilla)
```

```
# Separar características y etiquetas
X_train = train[['Celsius']]
y_train = train['Valks']
X_valid = valid[['Celsius']]
y_valid = valid['Valks']
X_test = test[['Celsius']]
y_test = test['Valks']
```

```
# Crear el modelo base SGDRegressor con los paaámetros especificados
model = SGDRegressor(learning_rate='constant', eta0=1e-4, max_iter=1000000, random_
```

```
# Entrenar el modelo
model.fit(X_train, y_train)
```

```
# Predecir sobre los conjuntos de entrenamiento, validación y prueba
y_train_pred = model.predict(X_train)
y_valid_pred = model.predict(X_valid)
y_test_pred = model.predict(X_test)
```

```
# Calcular el error cuadrático medio (MSE) en los tres conjuntos
mse_train = mean_squared_error(y_train, y_train_pred)
mse_valid = mean_squared_error(y_valid, y_valid_pred)
mse_test = mean_squared_error(y_test, y_test_pred)
```