

simple_linear_swedish.ipynb

colab.research.google.com/drive/1n43PDda7gySw-Yj6liOA8MeUWkRh7IM5

Gmail

YouTube

Maps

News

Translate

WhatsApp

Downloads

JCO / OR User...

ear

Pages - NCS|Se...

ZType – Typin...

(1) Feed | Link...

GitHub

Kaggle: Your...

My groups

simple_linear_swedish.ipynb

File Edit View Insert Runtime Tools Help All changes saved

Comment

Share

Files

..

.config

sample_data

swedish_insurance.csv

+ Code + Text

RAM

Disk

Editing

1s

import numpy as np

import pandas as pd

import seaborn as sns

df=pd.read_csv("/content/swedish_insurance.csv")

df

X

Y

0	108	392.5
1	19	46.2
2	13	15.7
3	124	422.2
4	40	119.4
...
58	9	87.4
59	31	209.8
60	14	95.5
61	53	244.6
62	26	187.5

63 rows × 2 columns

0s

[2] df.isna().sum()

Disk

84.69 GB available

0s

completed at 10:33 PM

simple_linear_swedish.ipynb

colab.research.google.com/drive/1n43PDda7gySw-Yj6liOA8MeUWkRh7IM5

GmailYouTubeMapsNewsTranslateWhatsAppDownloadsJCO / OR User...earPages - NCS[Se...ZType - Typin...in(1) Feed | Link...GitHubKaggle: Your...My groups

Update

simple_linear_swedish.ipynb

FileEditViewInsertRuntimeToolsHelpAll changes saved

CommentShare

RAMDiskEditing

Files

..

.config

sample_data

swedish_insurance.csv

df.isna().sum()

X0Y0dtype: int64

[3] df.head

<bound method NDFrame.head of X Y

0108392.5

11946.2

21315.7

3124422.2

440119.4

... ..

58987.4

5931209.8

601495.5

6153244.6

6226187.5

[63 rows x 2 columns]>

[4] x=df.iloc[:, :-1].values

y=df.iloc[:, -1].values

y

array([392.5, 46.2, 15.7, 422.2, 119.4, 170.9, 56.9, 77.5, 214. ,

65.3, 20.9, 248.1, 23.5, 39.6, 48.8, 6.6, 134.9, 50.9,

4.4, 113. , 14.8, 48.7, 52.1, 13.2, 103.9, 77.5, 11.8,

98.1, 27.9, 38.1, 0. , 69.2, 14.6, 40.3, 161.5, 57.2,

217.6, 58.1, 12.6, 59.6, 89.9, 202.4, 181.3, 152.8, 162.8,

0scompleted at 10:33 PM

Disk84.69 GB available

simple_linear_swedish.ipynb

colab.research.google.com/drive/1n43PDda7gySw-Yj6liOA8MeUWkRh7IM5

Gmail

YouTube

Maps

News

Translate

WhatsApp

Downloads

JCO / OR User...

ear

Pages - NCS|Se...

ZType – Typin...

(1) Feed | Link...

GitHub

Kaggle: Your...

My groups

Update

simple_linear_swedish.ipynb

File Edit View Insert Runtime Tools Help All changes saved

Comment

Share

Files

..

.config

sample_data

swedish_insurance.csv

RAM

Disk

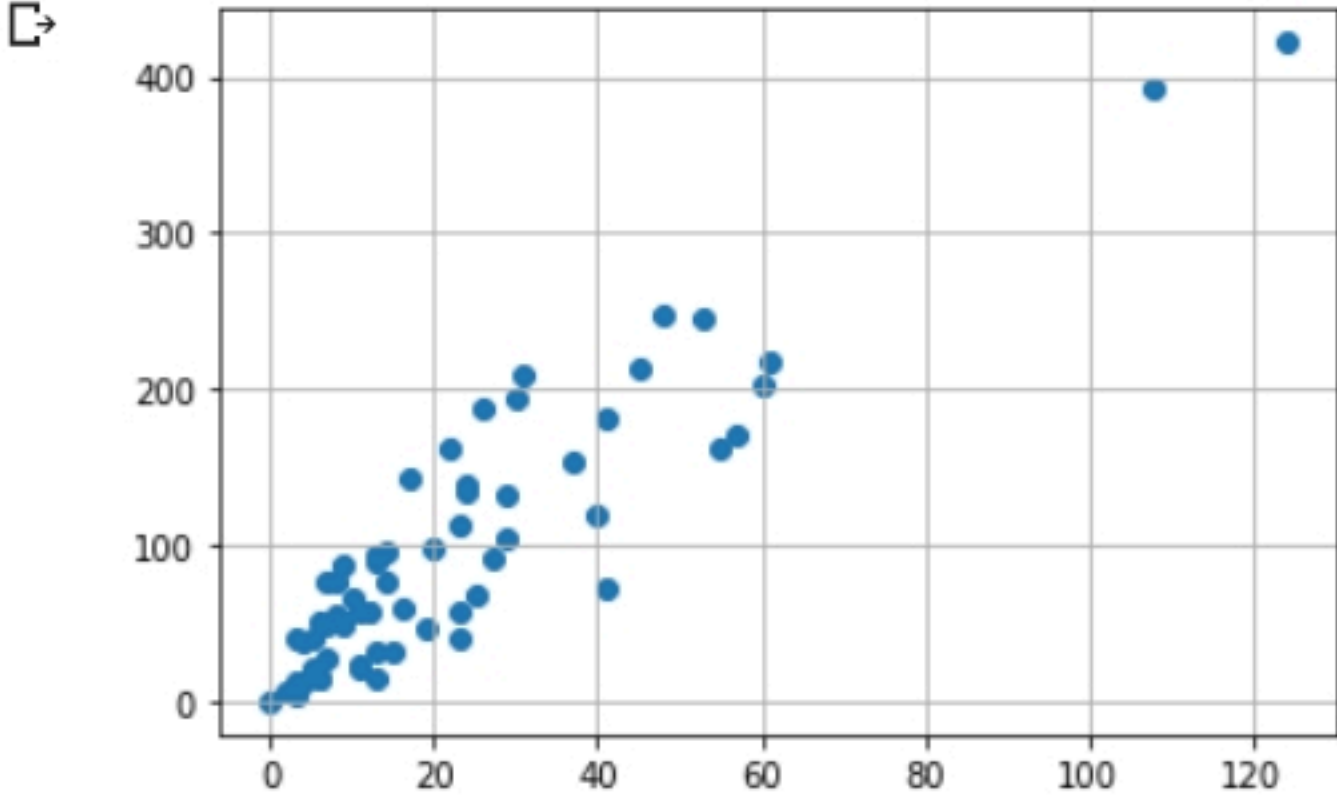
Editing

1s

import matplotlib.pyplot as plt

plt.scatter(x,y)

plt.grid()



0s

[6] from sklearn.model_selection import train_test_split

x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=.30,random_state=1)

0s

[7] from sklearn.linear_model import LinearRegression

reg=LinearRegression()

reg.fit(x_train,y_train)

y_pred=reg.predict(x_test)

y_pred

print(reg.predict([[8]]))

[46.56983833]

0s

[8] plt.scatter(x_train,y_train,color='red')

completed at 10:33 PM

simple_linear_swedish.ipynb

colab.research.google.com/drive/1n43PDda7gySw-Yj6liOA8MeUWkRh7IM5

Gmail

YouTube

Maps

News

Translate

WhatsApp

Downloads

JCO / OR User...

ear

Pages - NCS|Se...

ZType – Typin...

(1) Feed | Link...

GitHub

Kaggle: Your...

My groups

simple_linear_swedish.ipynb

File Edit View Insert Runtime Tools Help All changes saved

Comment

Share

Files

..

.config

sample_data

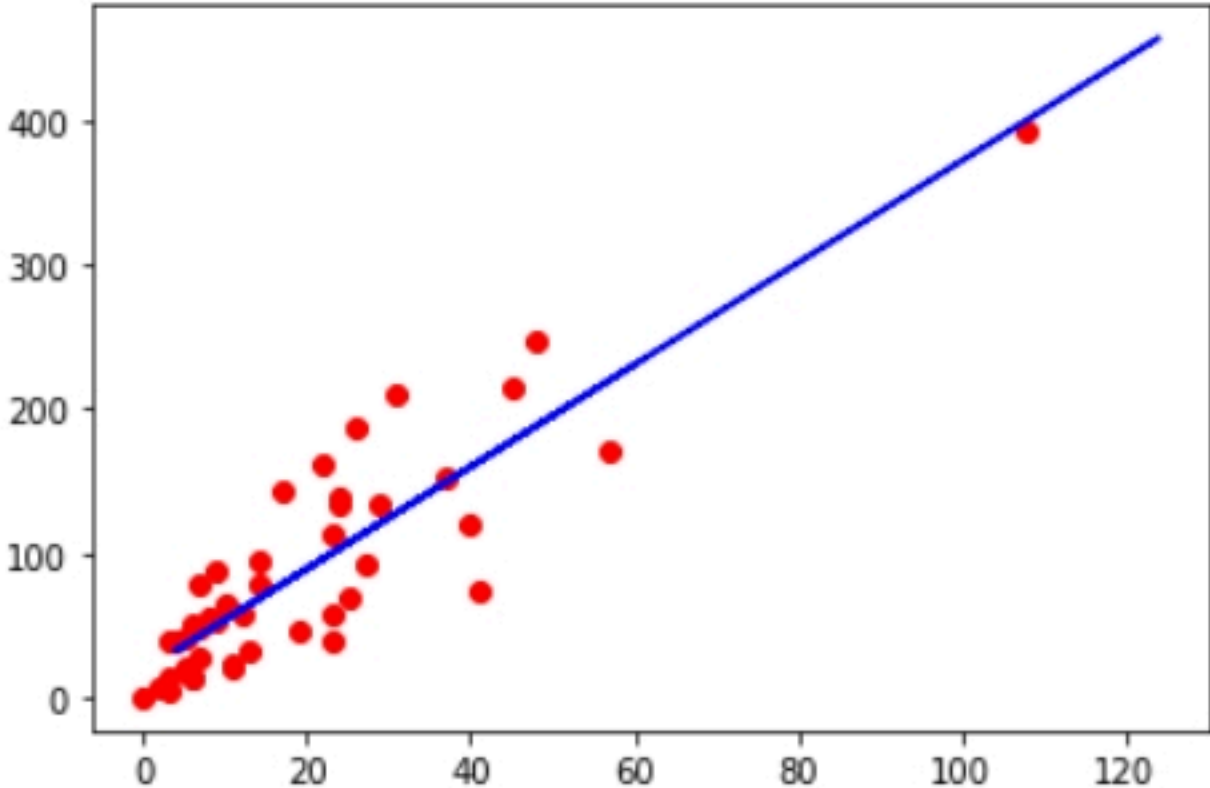
swedish_insurance.csv

+ Code + Text

0s

plt.scatter(x_train,y_train,color='red')
plt.plot(x_test,y_pred,color='blue')

[<matplotlib.lines.Line2D at 0x7f8127260910>]



0s

[9] print("slope is",reg.coef_)
print('constant is',reg.intercept_)

slope is [3.54028733]
constant is 18.247539677213723

0s

[10] from sklearn.metrics import mean_absolute_error
print("MAE",mean_absolute_error(y_test,y_pred))

MAE 26.928440663868162

Disk 84.69 GB available

0s completed at 10:33 PM

simple_linear_swedish.ipynb

colab.research.google.com/drive/1n43PDda7gySw-Yj6liOA8MeUWkRh7IM5

GmailYouTubeMapsNewsTranslateWhatsAppDownloadsJCO / OR User...earPages - NCS|Se...ZType – Typin...in(1) Feed | Link...GitHubKaggle: Your...My groups

Update

simple_linear_swedish.ipynb

FileEditViewInsertRuntimeToolsHelpAll changes saved

CommentShareSettings

RAMDiskEditing

Files

..

.config

sample_data

swedish_insurance.csv

+ Code+ Text

✓0s

from sklearn.metrics import mean_absolute_percentage_error

print("precentage",mean_absolute_percentage_error(y_test,y_pred))

precentage 0.5464782001038896

✓0s

[12] from sklearn.metrics import mean_squared_error

print("MSE",mean_squared_error(y_test,y_pred))

MSE 1011.7373603863069

✓0s

[13] import math

x=math.sqrt(1011.7373603863069)

x

31.80781917054841

✓0s

[14] from sklearn.metrics import r2_score

print("score",r2_score(y_pred,y_test))

score 0.9041113360879512

<>

Disk84.69 GB available

✓0scompleted at 10:33 PM