

	Tana depologication
Jan +	Experiment No: 12 Decision Tree dassification
Networks for an Application wing them	
	Aim: nos excepso
	To classify the social Network dataset using
	To classify the social Network dataset using Decision to analysis
2839	ALVERSON STATEMENT STATEME
(77)	Soul ce a code: Brancos de réplacement par la code
	from google. colab impost drive
	drive mount ("/ content/gdrive")
23	Warm skleasn mansal netwerk impost MIPREGES
files +	import pandas as pd
	import numpy as np standa.
	import matpætlib.pyplot as plt uguer same
	dataset = pd. sead_csv ( /content/gds elmy psquel social_
	200 Network - Ads csv")
	X = dataset. ?loc [:, [2,3]]. values
	y = dataset . ?loc[:, -i]. values
(50.0	from sklearn model selection impost train_test_split
	x-train, x-test, y-train, y-test, = train_test_spect (x, y,
	test_slze=0.25, &andom_state=0)
	x. &lape, y. &lape = ((1000, 100), (1000,))
, t, X)	from skloan. psepsocessing import standardscales
	8c = Standard Scaler()
	x-tlain = sc. fit-teansform (x-train)
	$x_{-}$ test = $8c$ . teans form ( $x_{-}$ test) and $x_{-}$ test
west x	paint (files siete for Training Data= fel siete
("E(1308	grom sklearn tree import Decision Tree classifies classifies = Decision Tree classifies (criterion = 'entropy',
g. testiff	classifies = Décision Tree classifies (critérion = 'entropy',
	2 andom State = 0)
PS 215 dd	classifier. git (x-train, y-train)
	y-pred = classifies.predict (x-test)
Theresian	2 mil seepest son margain with suit these
V	hospital 28 facture 24 book befused

from sklearn metrics import confusion matrix cm = confusion\_matrix (y-test, y-pred) print (cm) from matplotlib. colors import Listed colormap x\_set, y\_set = x\_train, y\_train

X1, X2 = np. meshgrid (np. assange (stast = X-set [:, o]. mil)-1, stop = x\_set [:, o] . max() +1, step = 0.01), np. assange (8tast = x \_ set [:, 1]. min 1) -

1, stop = x\_set [:, 1], max()+1, step=0.01))

plt. contous (X1, X2, classifies. predict Inp. assay ([X1. Ravell),

X2. gavel () J. T). Reshape IX, Shape), at

pha = 0.75, cmap = Listed Colognap (1'Red', 'gleen'))

plf. xlim (Xr. min (), XI. max ())

plt. ylim (x2. min1), x2. max())

for 9,9 in enumerate Inp. unique (y-set)):

pet. scatter (x: set [y. set == j, o], x. set [y-set == j, i],

c=Listed colormap (1'Red', 'green')) (i), label=j)

pet title l' déasion Tele classification (Training set)')

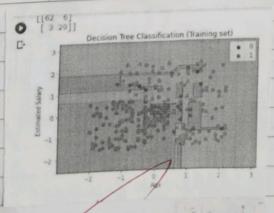
pet xlabel ('Age')

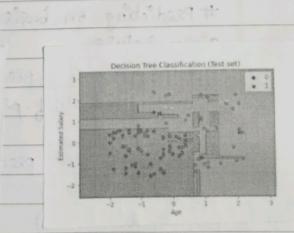
pet ylabel (' Purchase')

plt. legend ()

plt. Show 1)

output: when ?





7 Result: Thus the program for decision tree classification successfully executed and the output is verified.