Decision Tree classification Ex:No: 12 Date: i.p. everyof start x setti, al. min 1) -1, ty = x - 11 , (11. brasel) +1 Brogram code: from google colab import drive drive, mount ("/ content / gdrive")) Import python's necessary libraries dataset = pd. read\_isu ('') x = dataset iloc [ ., [2,3]]. values Y = dataset . iloc [:, -1]. values. x-train, x-test, y-train, y-test = train\_test\_ split (x, y, test\_size = 0.25, random\_state = 0) Si = Standard Scaler () p 1 tei x ) rellace. He x-train = Sc. fit - transform (x-train) X-test = Sc. transform (x-test) classifier. fit (x\_train, y\_train) y-pred = classifier. predict (x-test) um = confusion - matrix (y-test, y-pred) print ("confusion matrix: \n", cm)

x-set, y-set = x-train, y-train X1, X2 = hp. meshgrid ( np. awange ( start = x\_ set [:, 0]. min () -1, stop = x\_set [:, 0]. mas() +1, step = 0.01) from google what import drive leve mount ( " certent / glaine") fruction. Hay XI, X2, classifier. predict ( np. away ([XI. Navel) X2. ravel()]). T). restrape (XI. shape), alpha = 0.75, emap = Listed Colormap (1'red', green y = dataset ilea L: 11. values. plt. x lin (x1. min(), x1. max()) for i, j in renumerate ( up. unique ( y-set)). plt. scatter (x\_set [y\_set == j, 0], x\_set [x\_set x train + de . fit - transpiron ( x train , [1 , j = = c = Listed Colormap (('red', 'green'))(i), Label = j) plt. title ( Decision Ince classification ( Training set) plt. xlabel et Age Dissure regissor = buy p plt. ylabel ( Purchase ) plt. legend on all section a course of trust plt. Show ()

output: dissipporter definition do i ily - The menters but Married all x = [ [ 181, 80, 91], [182, 90, 90], [186, 100, 95], [184, 200, 15] [185 360,94], [186, 400,95] [187, 500, 96], [189, 600, 97], [190, 700, 75] Result: 101,0001, 201] [192, 1001, 001, [19] [194,008, 191] Thus the program is successfully executed & the output is recipied. " slowed " slowed " slowed (1. x) the fit (x, y) prediction & self predict (11181.80, 1111) prediction in - all predict ([11:15, 100, 72]) ( ) rationed ) time my tunditury 1 trung