Exp:14 (2 K-Means 1 1917. H) (Shadtun in wadli) | altit. HS Aim: To implement a k-means dustering Exchnique using python language. Code:in port numpy - tas no import, interpandia as pd. from metaplottib import pyplot as ple Skleain dataset ... samples ... generatoringont 11. Senier (1 minus. chilster. comins) from skleain cluster import k-means Ly: make-blobs (n sample = 300, center = 4 Plt. scatter (x [:, o], x [:, 1]) WCS8 EJ for ci is i range (1,11): 11/11/12 restorable kmeans = k means (n-cluster=1, unit= 1k-meanstt max-iter=300, n-iter=10, randont=0) K-means = fit (x) is it sport as the wess. append (k-means. Intera-)

PH. Plot (range (1,11), wess) Plt. title (! Elbow of method!) PIE. xlabel ('cluster') PIt. y label ('wess') PIE. Mow () k means: Kmeans (n- Cluster = 4, unit = t-meant1 max -iter=300, n-itit=10, random-state=0 Pred-y: k means. fit- predict (x) 719 20 Joly Plt. Scatter (x[:,0], x[:,1]) Plt. scatter (k means - cluster cinter - [1,0] S=30, C='red') Plt. show() 00 - styruse 1) & dold- a devented () - 3/co . 00.0 . 10/2 - 8/2/ ([],:] x , [04] x -202468 Number of cycle Result: 1= ()(1) - (1) MIN JOH & MINISTER 1 1 + 61111111-71 k means unstering technique aring pythen language is, successfully executed e output verifieds. 31.5000-4) brings