Irragme that you have solected douter from the

all electronics doita warehouse for analysis The dollars will be huge! The following down are a list of oil electronics jorices for

Commonly sold Hems (nounded to the meanest dollar) The numbers have been souted:

1,1,5,5,5,5,5,8,8,10,10,10,10,12,14,14, 25,25,25, 25, 25, 28, 28, 30,30,30

") Partitioning the dataset using an equalfrequency portiotioning method with bin equal to 3 (11) apply data smoothing using bin means and bin boundary ii) plot histogram for the above frequency division histogram for the above fastioning. i) Partitioning using equal frequency.

We divide the dotaset into 3 equal trequency trins, each containing the same number of observations. To calculate the Bin 3: Mean lon boundaries, we count the number of Observations in the dataset and divide that by the number of bins, in this Case 3. Each bir will Contain

40 = 13 observations

The bin boundaries for equal-trequence Partitioning method are: Bin 1:7-12

Bon 2 5 12-21 Bin3: 21-3

11) Data smoothing listing bin means lift) Diothing histogonoum: and him boundaries.

For data smoothin, we calculate -the mean of the each bin and use that as the responementative Value for all observations in that

Rin1: Mean = (1+1+5+5+5+5+5+8+ 8+10+10+10)/13

Bin 2: Mean

= 15

=15+15+15+18+18+18+18+18+20+20+ 20+20+20+20+20+20+21+21+ 21+21+25+25+25+25+ 28+28+30+30+30)

= 24

The foin boundaries for smoothed data using bin means are Bin 1: 6-12

Bin 2:12-21 Bin 3 : 21-30

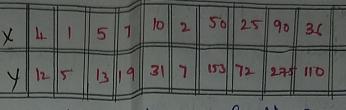
Osing bin boundaries abtained from either equal frequency or data Smoothing, we can plot or histogram by eneating bons of the same with that span the bin boundones and the height of each born is proportion to the frequency of observations in that bin. The x-axis nepresents the Price of the 4-term and the y-axis Depresents the frequency of Observations.

R-program:

Load the 99 plot 2 library 1969any (99 plots) (neate a vector of the prices data L-C(1,1,5,5,5,5,5,8,8,10,10,10) 10,12,14,14,14,15,15,15,15,15,15, 18,18,18,18,18,18,18,18,20,20,20, 20,20,20,20,21,21,21,21,25,25 25,25,25,25,28,28,30,30,30). Dontition the data rising equalfrequency

binned - data < Cut (data, boneaks = 3, labels C("1-19";"20-39","40+") oright = faise) Calculate the ban means bin-meanst topply (data, banned-data, mean) Calculate the bin boundwires bin-boundariest C-inf, 19,39,19mf) Apply data smoothing using bin mean table can be brotted as follows and bin boundaries smoothed-datax Cut (data, breaks = bin - boundaries, labers - bin - means, sight-false). Plot the histogram ggplot (data-frame (smoothed-data), aes (8 moothed - data))+ geam. histogram (bin width = 1, Colon = black ", fill="white") + labs (x-price", Y=frequency")+ gg title ("HIStogram of Smoothed all electronics paices") Show the plot plot (39 plot (data-frame (smootheddata), as (smoothed-datal) The following Lable would be protted as (X,y) points, with the first column being the x values as mumber of mobile phones sold and the second Column being the y values as maney To use the scatta plat for how many

mobile phones sold.



The scortter prot for the given (4,12),(1,5),(5,13),(7,19),(10,31), (2,7),(50,153),(25,72),(90,275) (36,110) 4 4 - aust : 110