CROWD COMPUTING – JUST ESTIMATE 04

So let us try to programme this particular concept first of all i will take a list name estimates in which i will store the estimate of seventy five people i have this data here or so i will just copy paste as you know we have to calculate the trimmed mean for trimmed mean we have to sort the data so i will just sort this particular list by using the functions sort this let us check whether there it has been sorted or not? Length of estimates just prints the values so that we get to know that estimate list has been sorted. I just run this, as you can see the list has been sorted we can see hundred, one twenty, one fifty, one seventy, one seventy five the sort function is by default sorts the data in ascending order, i repeat the sort function by default sorts the data in ascending function in ascending order so don't link this so now calculate the trimmed value as you know we are calculating the ten percent trimmed mean here so what do we do here? Will calculate the trimmed value as point one of length of estimates but here we can see that it will give us floor value or decimal value. So will type cast to int so that we obtain an integer value out of it. Here point one into seventy five will be seven point five but if will type cast to int it will take the floor value so seven point five into seventy five point one will be seven point five and it will take the floor value so TV will become seven. now what we have to do here is we have to delete the smallest ten percent values and largest ten percent values so first of all let us move the smallest ten percent value it is very easy in python you can just start the list from TV it will remove the first ten percent values if you want to check let us check here for i in range length of estimates we have to print here print estimates of i let us try to check this now yes we got the values here as you know initially it started from hundred but now it is starting from one eighty that means it has moved the smallest ten percent values so now let us try to remove the largest ten percent values here to so it is also very easy here in python we just remove the largest ten percent values for that we have to decrease the length of the estimates we will just take it from length of estimate to minus TV it will remove the largest ten percent values. Now we have to calculate the mean of this particular list that has been obtained by removing the ten percent smallest and ten percent largest values. So i will just what i will do here i will just use the function mean here that has been already defined in python that is mean you have to calculate the mean of estimates but mean function has been defined in library statistics so we have to import that, import that from statistics import mean, so that we can use here, so let us try to run this particular programme and check whether the mean that we calculated in the spreadsheet and the mean that we get here is same or not let us try to do that yes it is coming out to be exactly same, it is three fifty one point five nine and as you know that actual value was three seventy five we have discussed this fact earlier when we were discussing the values when we were discussing the estimates in a spreadsheet so as you can see we are don't with the programme here but in python there is much easier way to calculate the trimmed mean to there is an another way so let us try to do that also here for that you have to import other library that is scipy from scipy you have to import stats import stats. We just have to use the estimate dot sort here we need

not use any other estimates because as you can see that we have deleted the values here so we don't need that here i will just remove that i just comment it so now what we have to do here is we have to calculate the trimmed mean in python there is a function name trimmed mean which will directly calculate the trimmed mean so it is basically stats dot trim underscore mean you have to supply the particular list on which you have to calculate the trimmed mean so it is estimates here now you have to supply the percentage, the percentage of values that you have to remove from the top and bottom of your list so as we know we are using ten percent here so i will write point one here so the function here is first of all you have to import the stats library here from scipy after that after that the function is trimmed underscore mean in trim underscore mean you have to supply the list that you are operating on that is estimates here and then you have to supply the particular percentage of values that you need to remove from the top and the bottom, it is ten percent here so we will right point one here i will just straight way print the n value here let us try to run this again it is coming out to be three fifty one as you can see the values that we get here is three fifty five point one nine same as we got in spreadsheet same as we got in the programme so as you can see that it is very easy to calculate the trimmed mean in python very much easy in spreadsheet and very much easier than the previous programme. I hope this programme was useful to you. Have a nice day happy learning.