Homework 1

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Exercise 1

1. Number of students

Answer: 340823

2) Number of schools

The number of schools that students apply for : 641 (datstu)

The total schools we have (datsss):898

1. Number of programs

Answer:32

4) Number of choices

Answer: 2773

5) Missing test score

Answer:179887

6) Apply to the same school (diﬀerent programs)

Answer:120071

7) Apply to less than 6 choices

Answer:21001

Exercise 2

The excel sheet is attached (MyData.csv)

Exercise 3: Calculate the distance between junior high school, and senior high school.

The excel spreadsheet is attached (NewData.csv)

The data in the 8th column is the distances

Exercise 4:

Report the average and standard variance of the following variables for each ranked choice

1) Average of cutoff in 6 rank choices:

53.08875, 53.78412, 54.27642, 53.89142, 54.38412, 54.00198

2) Standard Variance of cutoff in 6 rank choices:

38.2766, 38.43077,38.51164, 38.45246, 38.66383,38.51818

3) Average of quality in 6 rank choices

281.0195, 281.8438, 282.4075, 281.9393, 282.5326, 282.0855

4) Standard Variance of quality in 6 rank choices:

42.84126,43.04399,43.15927,43.07522,43.36231,43.16302

5) Average of distance in 6 choices

2784.18, 1992.542, 1619.721, 1429.82, 1284.979, 1270.494

6) Standard variance of distance in 6 choices

2784.18, 8693.861 ,7945.922, 7705.74, 6726.782, 6899.188

Exercise 4 (Redo part)

1) Average of cutoff (quantile)

51.08572, 51.17344, 51.11016, 51.14934

2) Standard variance of cutoff

37.1583, 37.21752, 37.23295, 37.25242

3) Average of quality

278.5003, 278.6506, 51.11016, 51.14934

4) Standard variance of quality

41.35858, 41.45692, 37.23295, 37.25242

5) Average of distance

2784.18, 1619.721, 1284.979, 1270.494

6) Standard variance of distance

2784.18,7945.922, 6726.782, 6899.188

Exercise 5

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