Laboratory Work 1

Group 8

September 1, 2016

1 Assignment 1

Average Price in /$1000

A Higher Average
Price of $17 050
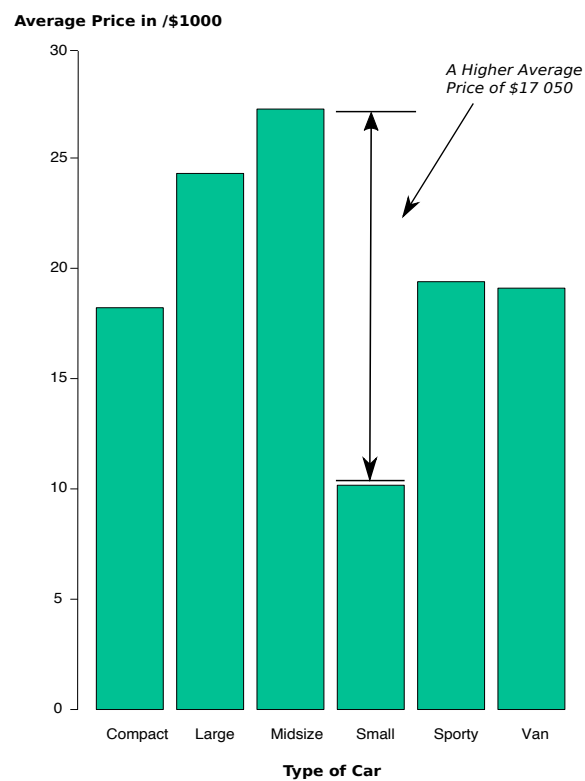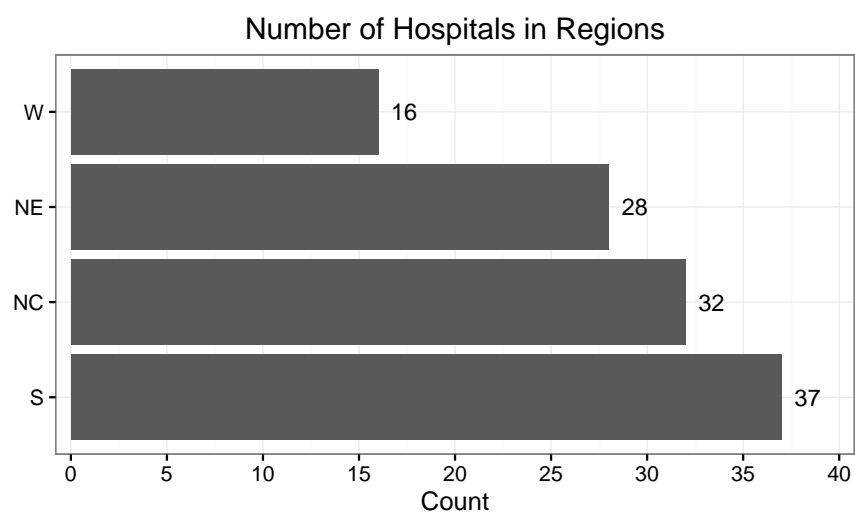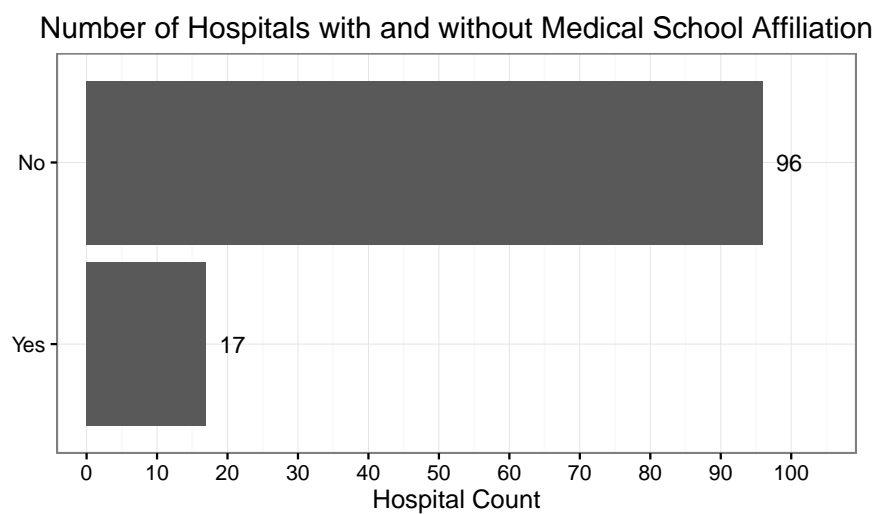
Type of Car

Source: Dataset Cars93, MASS Package

Figure 1: The Average Car Price for each type of Car

2 Assignment 2

Number of Hospitals with and without Medical School Affiliation

Number of Hospitals in Regions

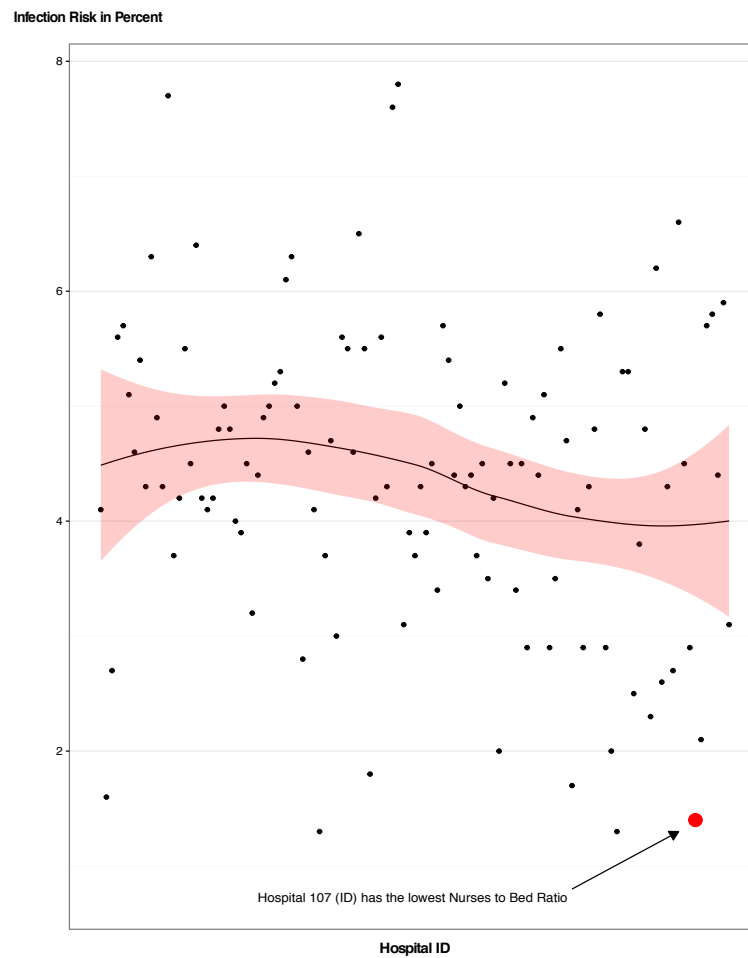Source: Study on the Efficacy of Nosocomail Infection Control (SENIC)

Figure 2: Count of observations of the two qualitative variables

There are only two qualitative variables among all: the Medical School Affiliation (X7) and Region (X8). Figure 1 is the combined chart requested.

We can observe from Figure 1 that

1. Only a few hospitals have affiliation with medical schools.

2. The number of hospital in a region varies a lot across regions. This does not tell us anything meaningful, however, unless this count is normalized by the population size of each regions. So if this is an real analysis, the next step may be to construct a graph of the ratio 'hospital number/population-size', or even better 'number of bed/population-size'.

3   Assignment 3

Infection Risk in Percent

Hospital 107 (ID) has the lowest Nurses to Bed Ratio

Hospital ID

Source: Study on the Efficacy of Nosocomial Infection Control (SENIC)