

No-show and Show Appointments Analysis

In this report, We will discuss health case of about 100,000 patients in Brazil. In order to analyze their health cases, Data-set focused on spread of some diseases with them and their show appointments for check-up

Data-set Meta Data

1. 'ScheduledDay' tells us on What factors are important for us to know in order to predict if patient will show up for their scheduled appointment or not.
2. what day the patient set up their appointment.
3. 'Neighborhood' indicates the location of the hospital.
4. 'Scholarship' indicates whether or not the patient is enrolled in Brazilian welfare program Bolsa Família.
5. 'No-show' column: it says 'No' if the patient showed up to their appointment, and 'Yes' if they did not show up.

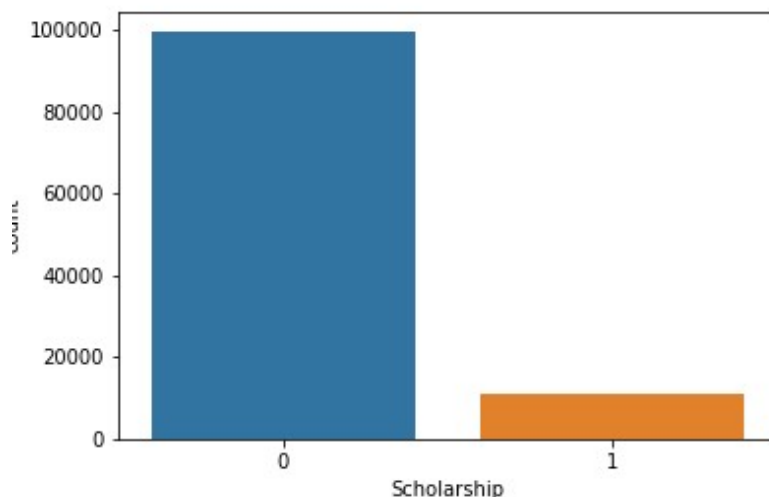
In Order to find to explore this data, We want to find out:

1. Relation between Scholarship People and their Ages
2. Spread of Diabetes in the patients
3. Stating contingency table of Dataset Variables
4. Getting no. of Showed and not-showed between males and females
5. No. of people stated in dataset across neighbourhoods

Statistics and Insights Gathered from the Data-set

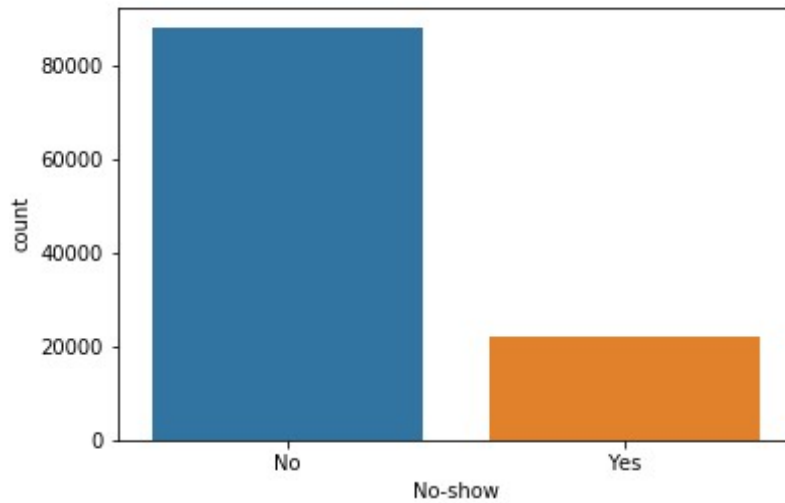
1- No. of Enrollments in Brazilian welfare

The below graph shows that the non-enrolled is more than who enrolled in scholarship



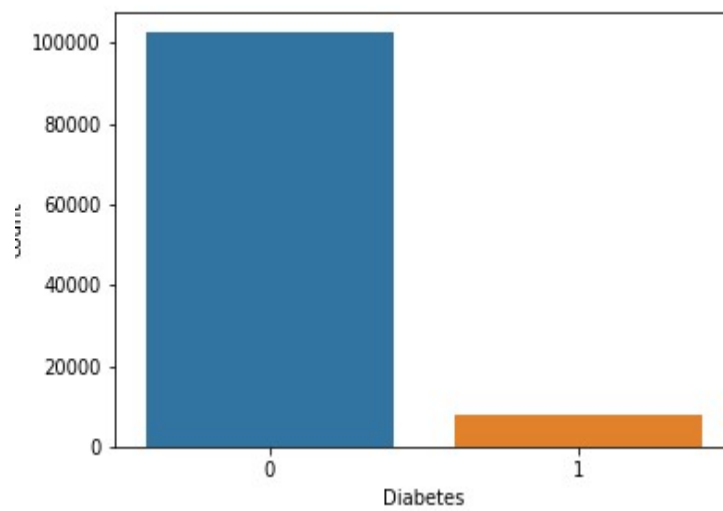
2- No. of people who showed-up and who doesn't

The below graph shows who showed-up is more than who doesn't



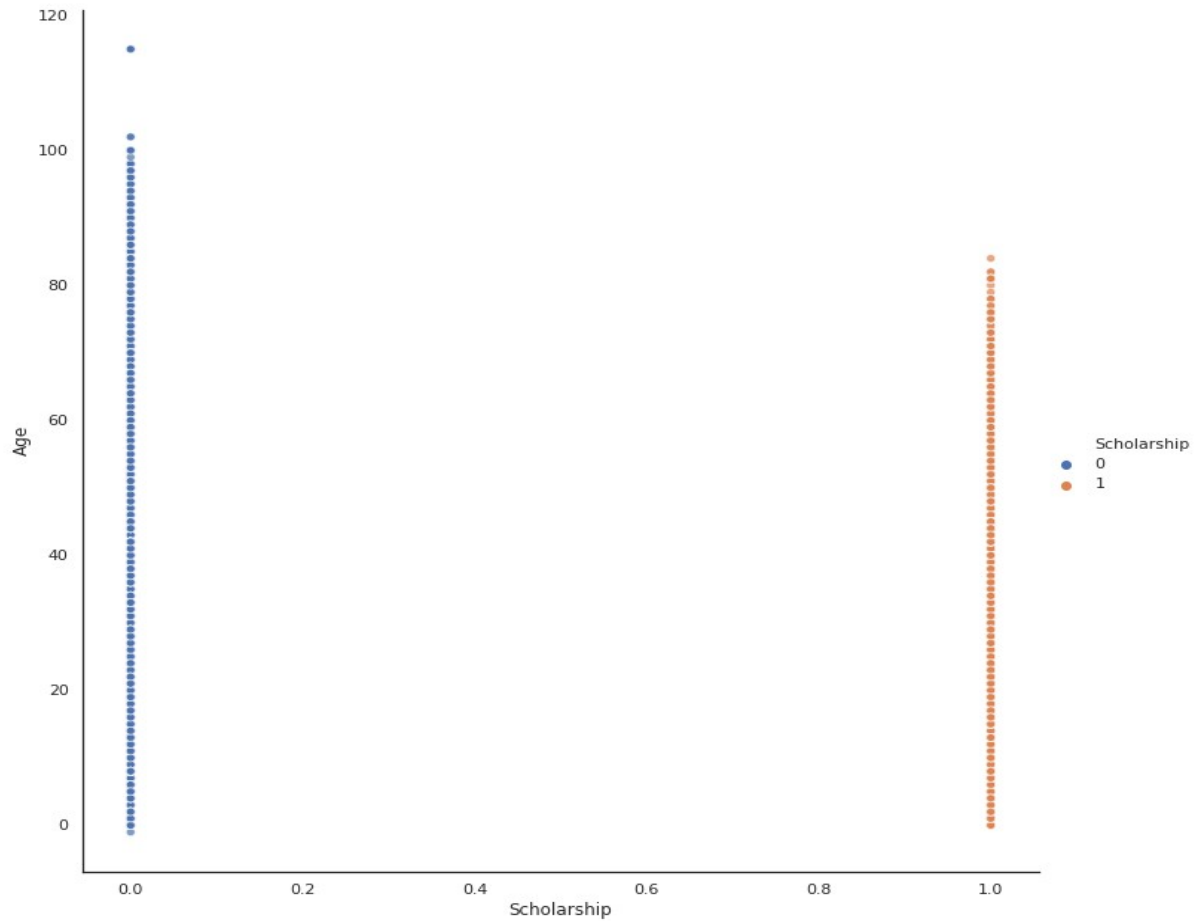
3- No. of people who have diabetes

The below graph shows that people who have not diabetes is more than who have.



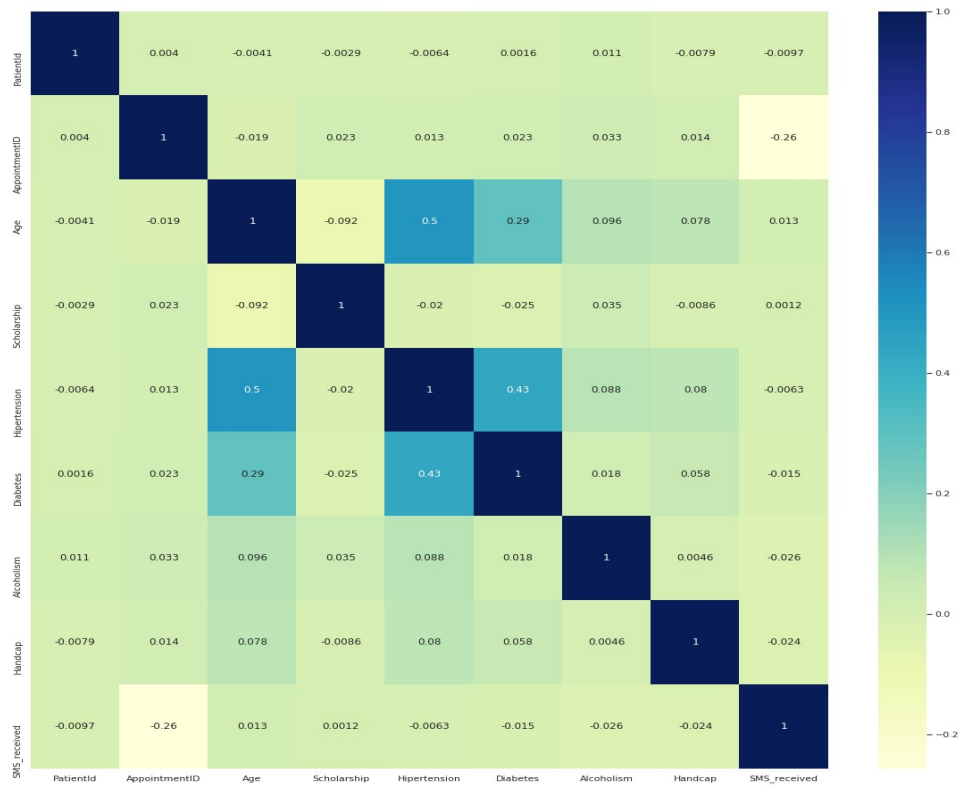
4- Representation of Scholarship People and their Ages

As seen, That there is nearly equality in the high and low ages and both can be having a scholarship or not and there is no specific relation with age

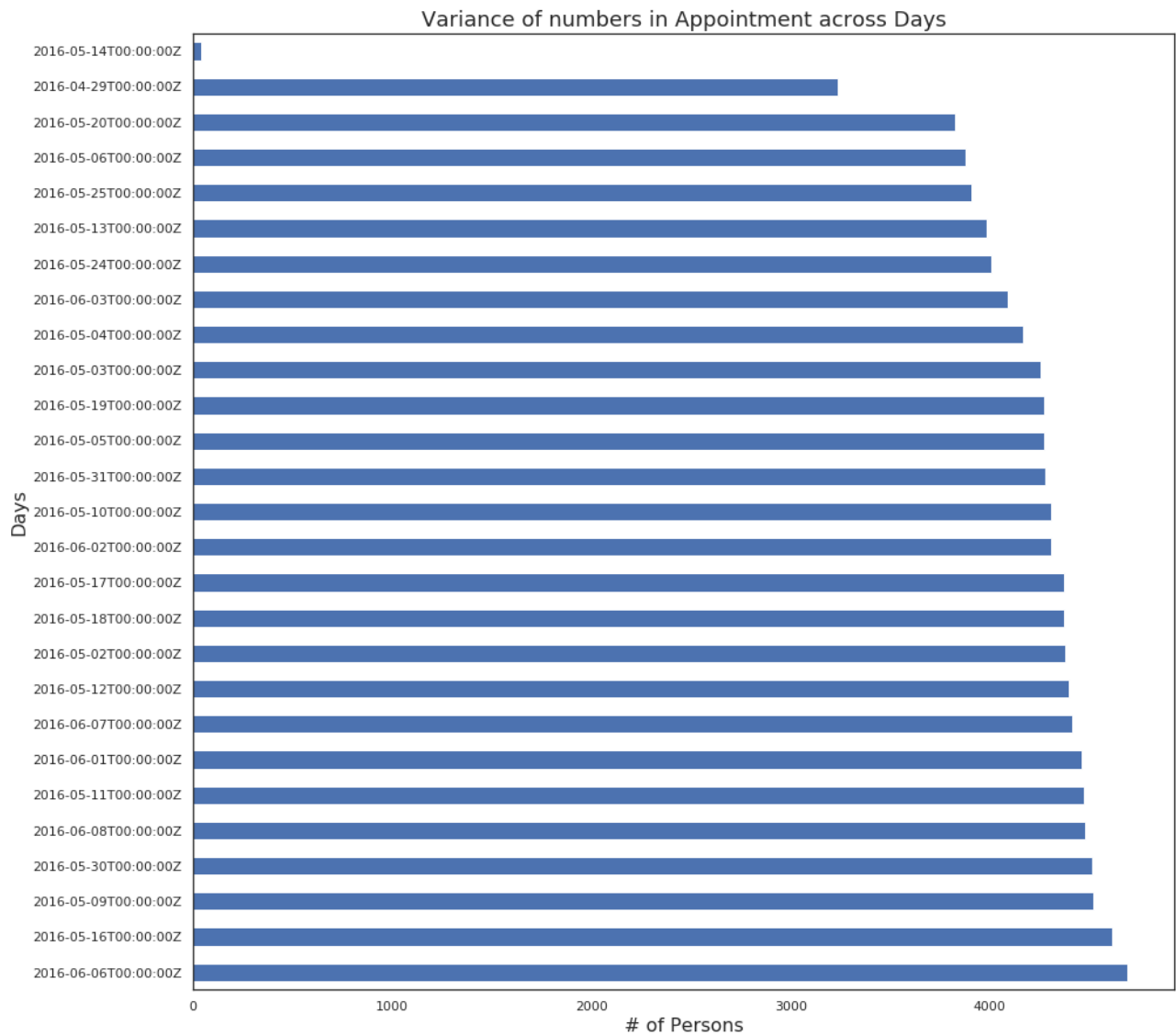


6- Heat-Map of contingency table of Data-set Variables

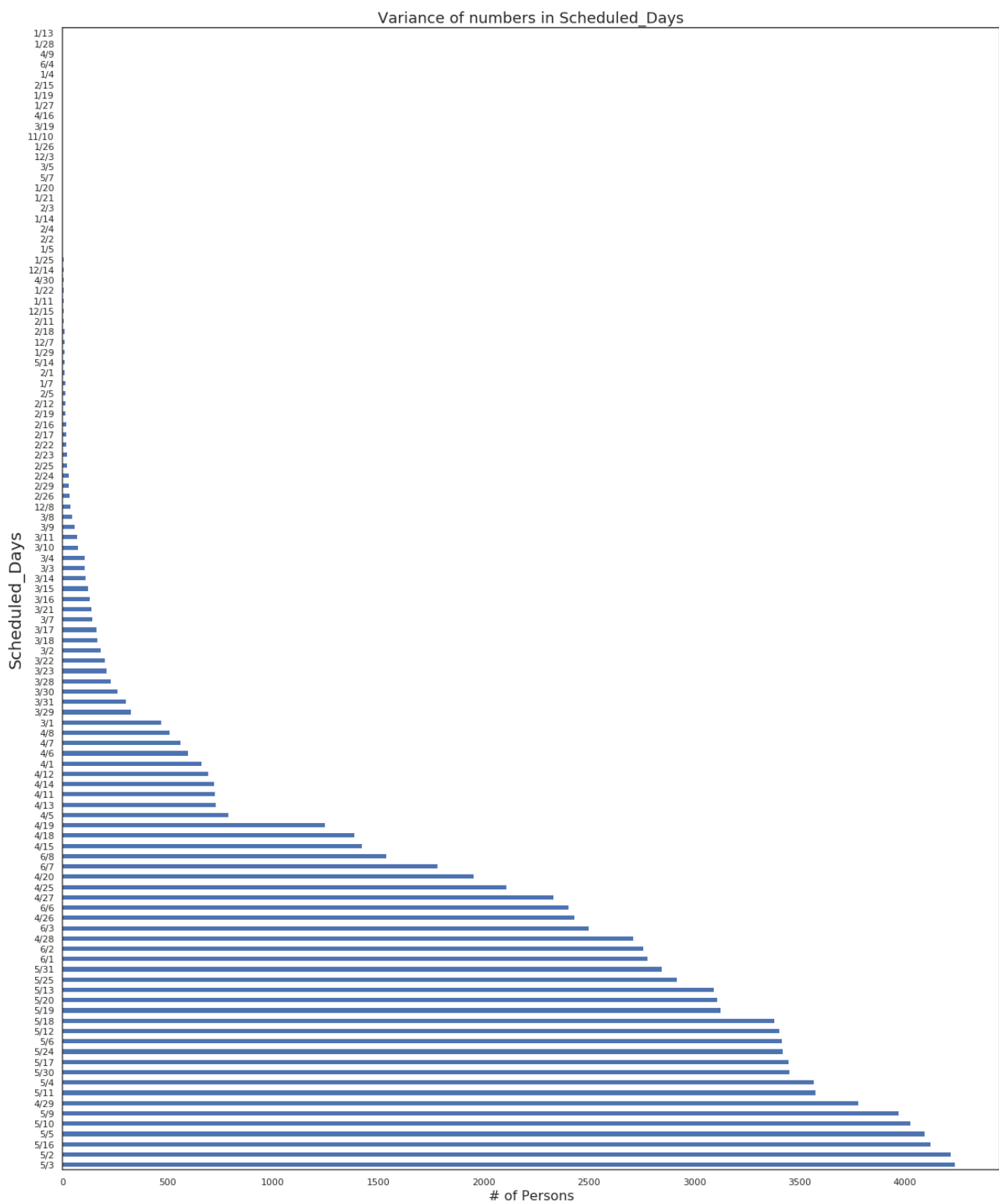
The Heat Map showed that there is relation between diabetes and hypertension and strong relation between hypertension and age



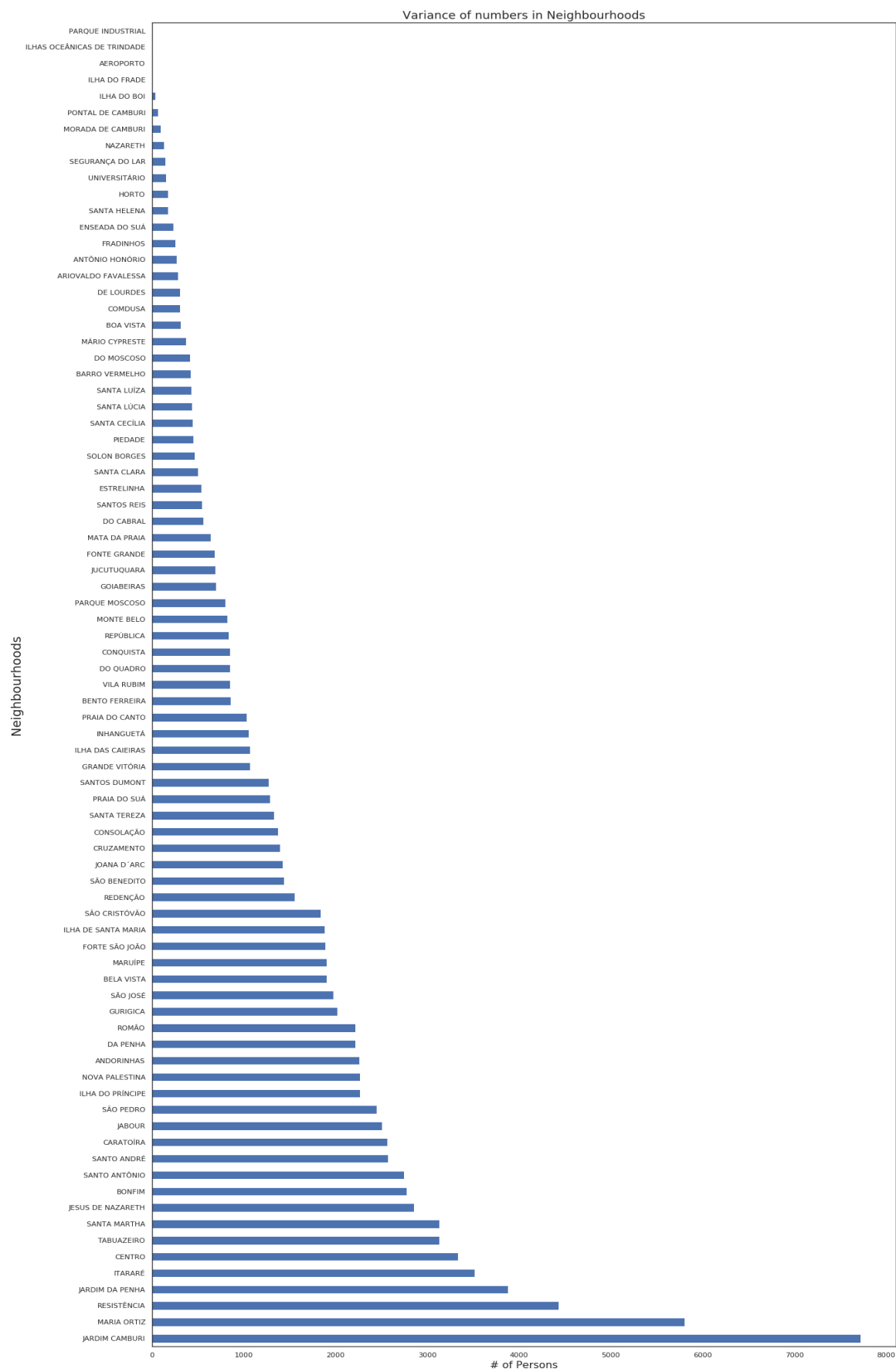
7- Time Series Analysis in no. of cases at Appointment Days



8- Time Series Analysis in no. of cases at Scheduled Days



9-Variance of numbers in Neighborhoods



Conclusions

What we found out is :

- 1- That there is nearly equality in the high and low ages and both can be having a scholarship or not and there is no specific relation with age
- 2- No. of people who showed-up is more than who doesn't
- 3- The Heat Map showed that there is relation between diabetes and hypertension & strong relation between hypertension and age
- 4- It's found that no. of showed and not showed females is more than males

Limitations

There is a problem in the data-set id we want to get more specific insights about the health state of the people in the data-set which is to collect this data after all of them are showed to the doctor to get the real-time state of them there are very possible of most them may have diabetes now, start drinking alcohols or having hypertension