***Information About Dataset***

The original dataset of nearly 300 variables was reduced to just about 20 variables. In addition to classical EDA, this dataset can be used to apply a range of machine learning methods, most notably classifier models (logistic regression, SVM, random forest, etc.). I Should treat the variable "HeartDisease" as a binary ("Yes" - respondent had heart disease; "No" - respondent had no heart disease). But note that classes are not balanced, so the classic model application approach is not advisable. Fixing the weights/undersampling should yield significantly betters results. Based on the dataset, I constructed a logistic regression model and embedded in it.

**The dataset contains 18 variables (9 booleans, 5 strings and 4 decimals). In machine learning projects, "HeartDisease" can be used as the explonatory variable,**

**Column Descriptions**

**HeartDisease:** Respondents that have ever reported having coronary heart disease (CHD) or myocardial infarction (MI).

**BMI:** Body Mass Index (BMI).

**Smoking:** Have you smoked at least 100 cigarettes in your entire life?

**AlcoholDrinking:** Heavy drinkers (adult men having more than 14 drinks per week and adult women having more than 7 drinks per week

**Stroke:** How many people have stroke

**PhysicalHealth**: Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? (0-30 days).

**MentalHealth:** Thinking about your mental health, for how many days during the past 30 days was your mental health not good? (0-30 days).

**DiffWalking:** Do you have serious difficulty walking or climbing stairs?

**Sex:** Are you male or female?

**AgeCategory:** Fourteen-level age category. (then calculated the mean)

**Race:** Imputed race/ethnicity value.

**Diabetic:** (Ever told) (you had) diabetes?

**PhysicalActivity**: Adults who reported doing physical activity or exercise during the past 30 days other than their regular job.

GenHealth: Would you say that in general your health is...

SleepTime: On average, how many hours of sleep do you get in a 24-hour period?

Asthma: On average how many people suffering from asthama

KidneyDisease: Not including kidney stones, bladder infection or incontinence,

SkinCancer: How many suffering from skin cancer