### Missing Values

Here in the dataset we can missing values for number of columns:

1) fill missing data of normalised-losses, price, horsepower, peak-rpm, bore, stroke with the respective column mean

2) Fill missing data category Number of doors with the mode of the column i.e. Four

df\_temp = automobile[automobile['normalized-losses']!='?']

normalised\_mean = df\_temp['normalized-losses'].astype(int).mean()

automobile['normalized-losses'] = automobile['normalized-losses'].replace('?',normalised\_mean).astype(int)

df\_temp = automobile[automobile['price']!='?']

normalised\_mean = df\_temp['price'].astype(int).mean()

automobile['price'] = automobile['price'].replace('?',normalised\_mean).astype(int)

df\_temp = automobile[automobile['horsepower']!='?']

normalised\_mean = df\_temp['horsepower'].astype(int).mean()

automobile['horsepower'] = automobile['horsepower'].replace('?',normalised\_mean).astype(int)

df\_temp = automobile[automobile['peak-rpm']!='?']

normalised\_mean = df\_temp['peak-rpm'].astype(int).mean()

automobile['peak-rpm'] = automobile['peak-rpm'].replace('?',normalised\_mean).astype(int)

df\_temp = automobile[automobile['bore']!='?']

normalised\_mean = df\_temp['bore'].astype(float).mean()

automobile['bore'] = automobile['bore'].replace('?',normalised\_mean).astype(float)

df\_temp = automobile[automobile['stroke']!='?']

normalised\_mean = df\_temp['stroke'].astype(float).mean()

automobile['stroke'] = automobile['stroke'].replace('?',normalised\_mean).astype(float)

automobile['num-of-doors'] = automobile['num-of-doors'].replace('?','four')

automobile.head()

Installing Pandas profiling

import sys

!{sys.executable} -m pip install pandas-profiling

import pandas\_profiling as pp

pp.ProfileReport(automobile)