Prepare a prediction model for profit of 50\_startups data.

Do transformations for getting better predictions of profit and make a table containing R^2 value for each prepared model.

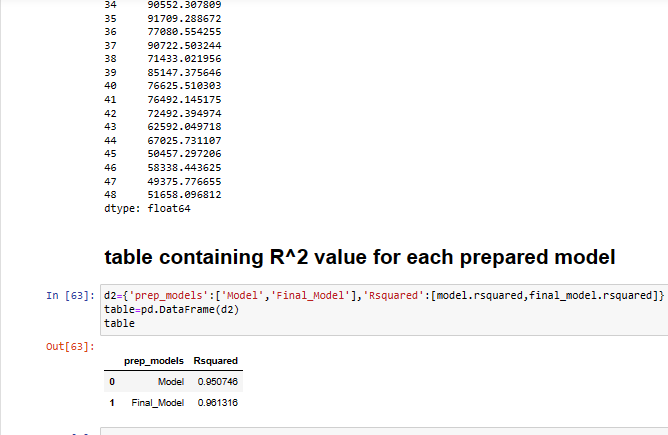
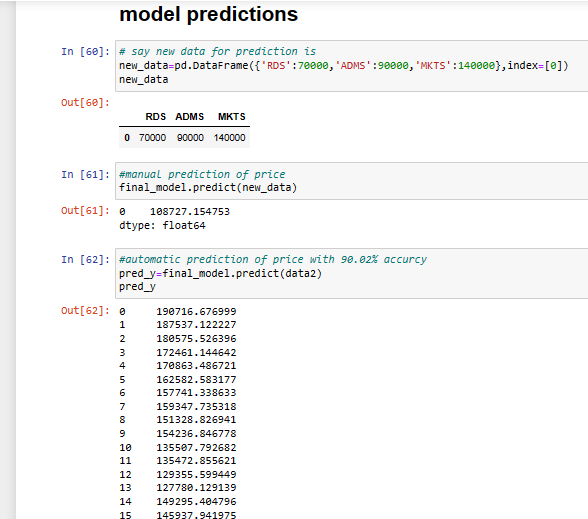
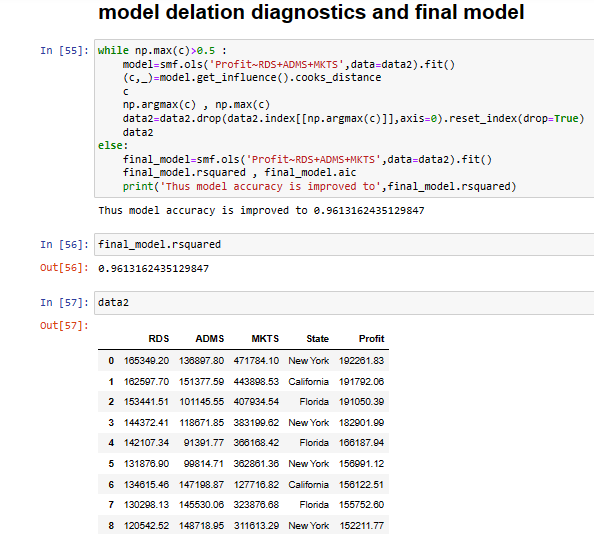
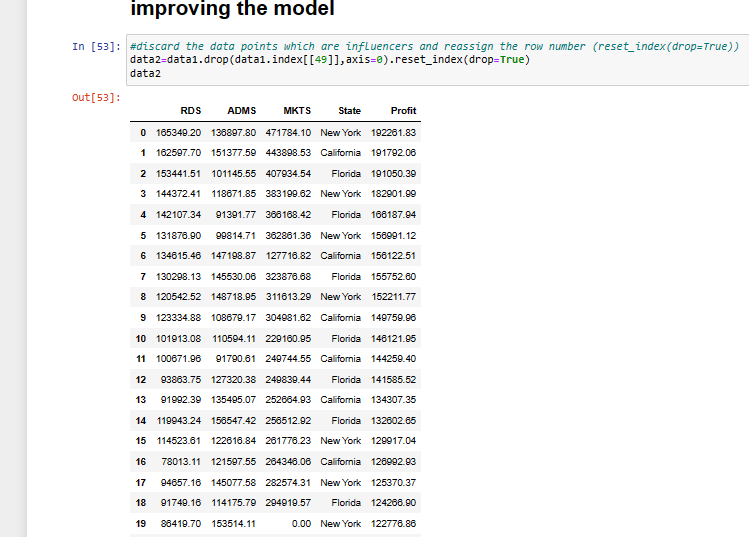
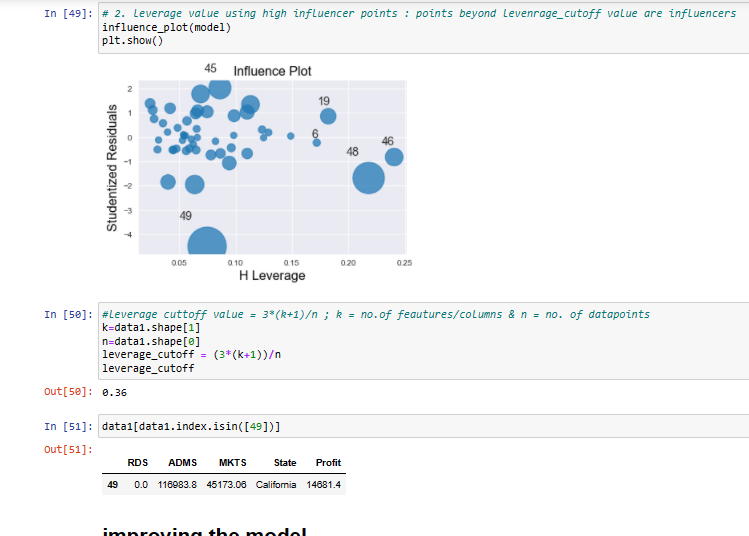
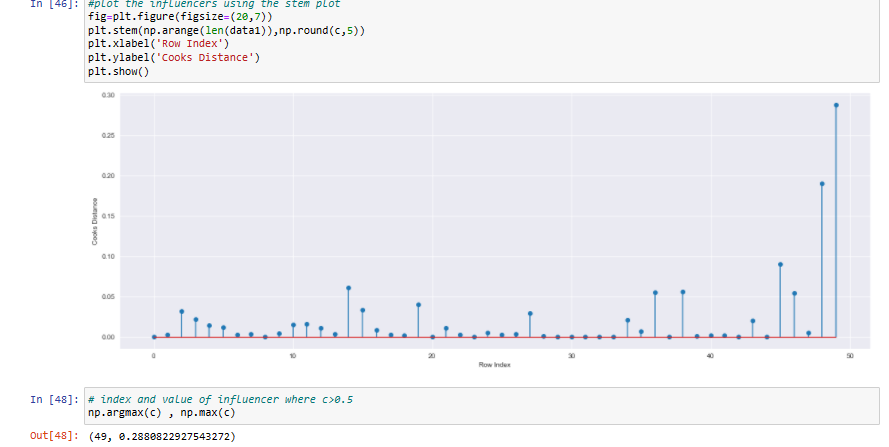
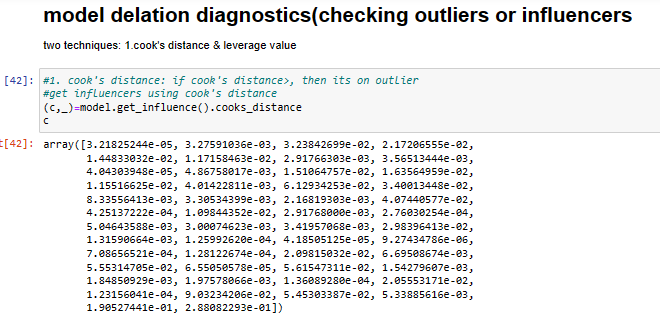
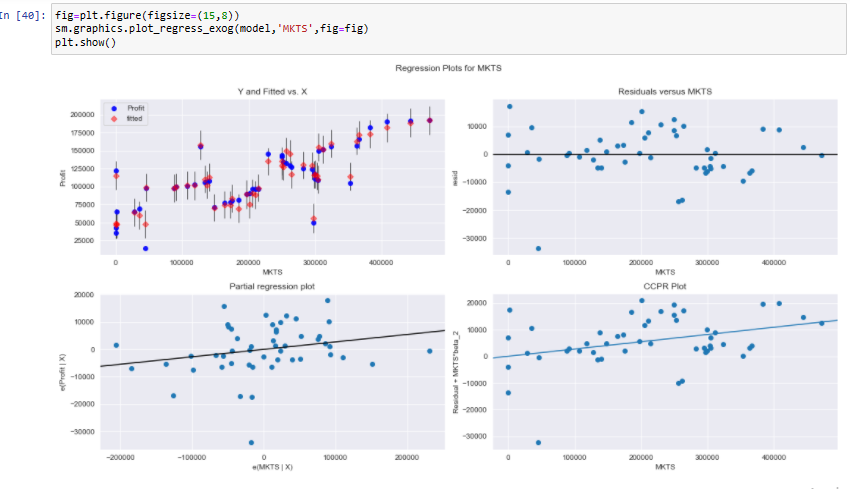
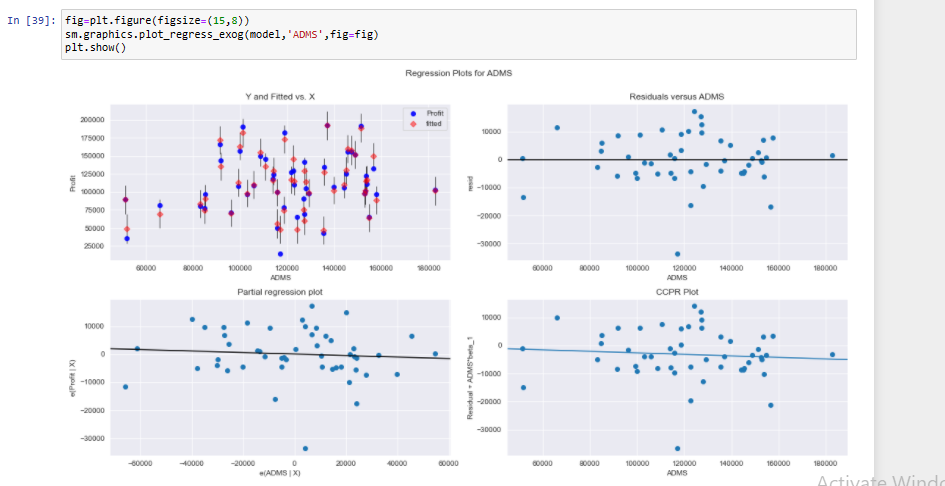
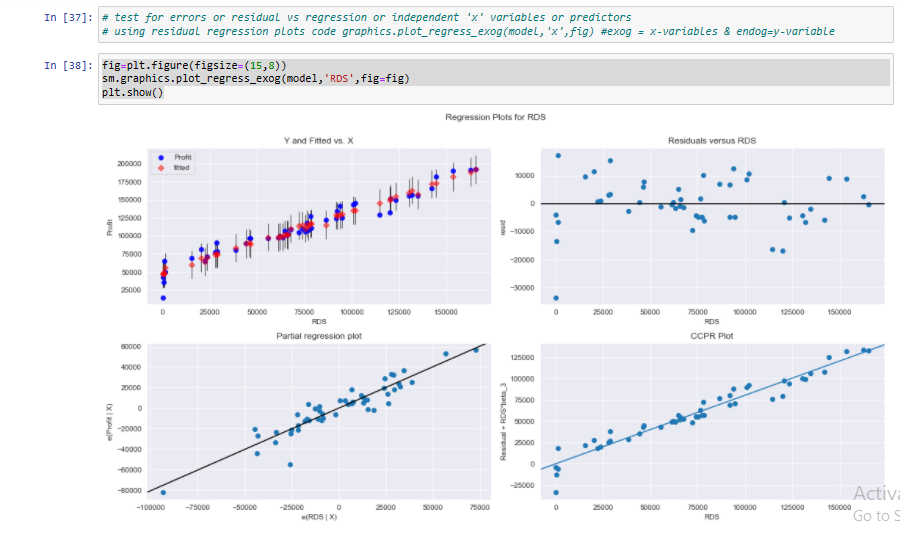
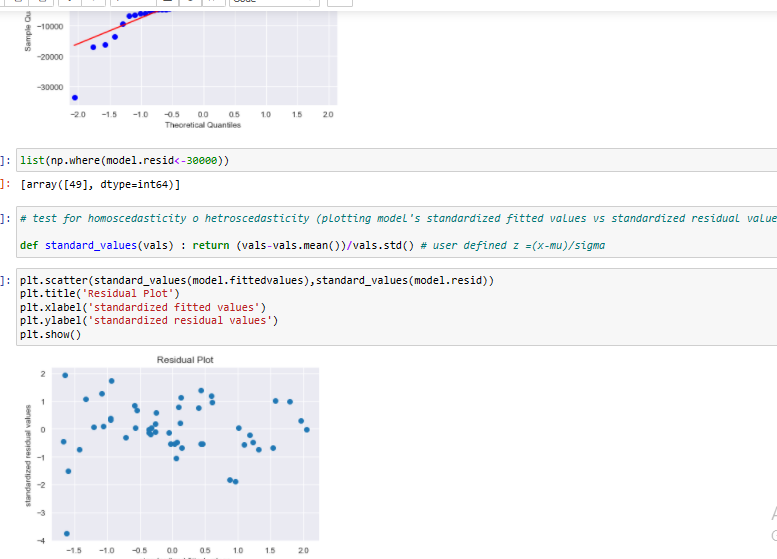
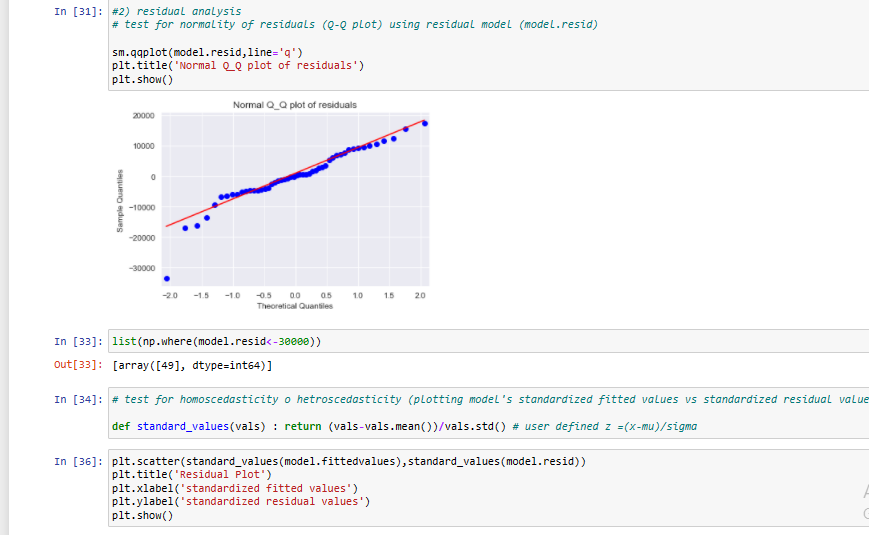
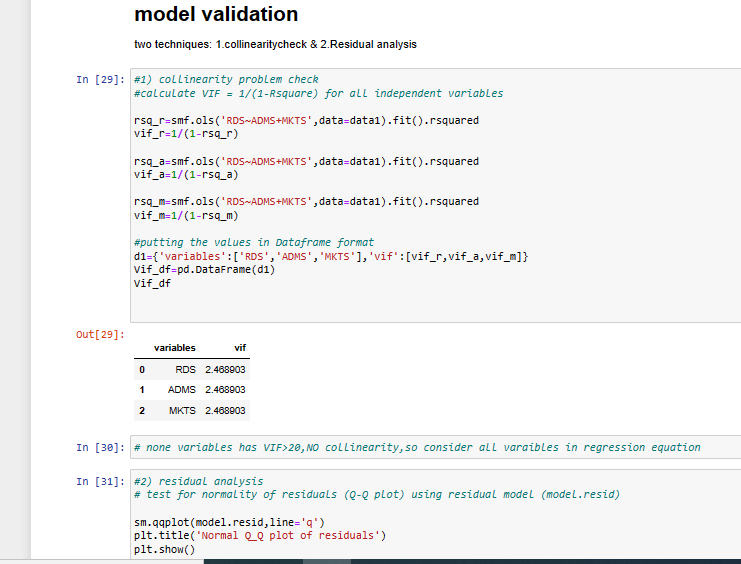
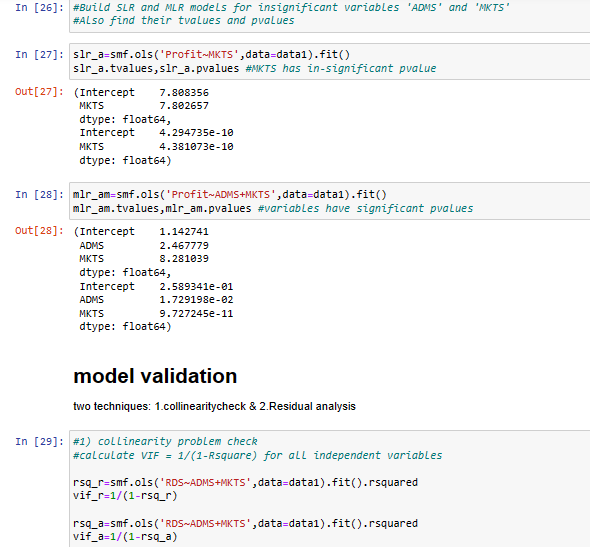
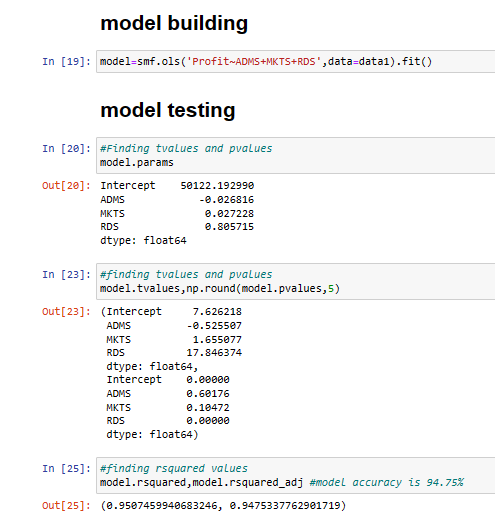
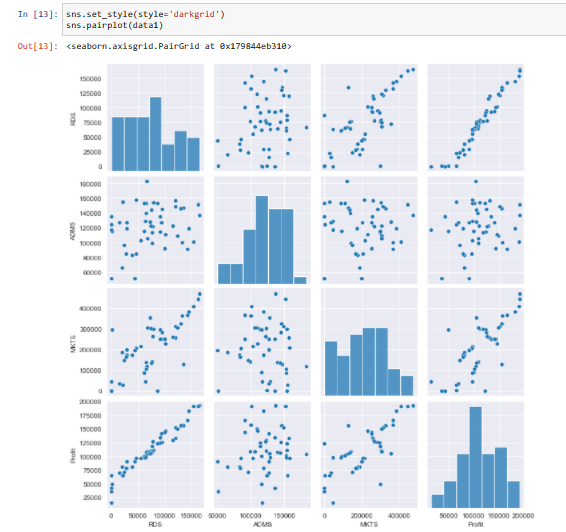
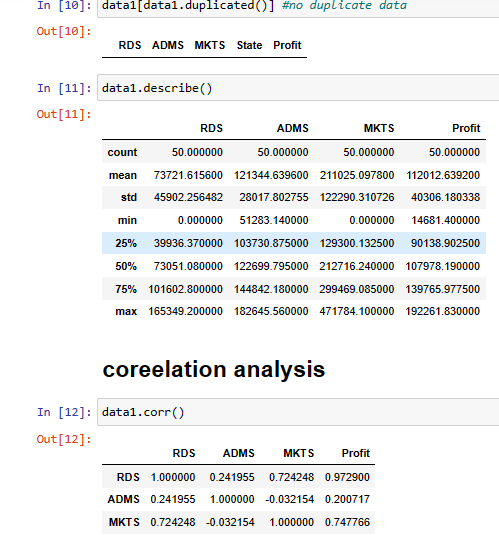
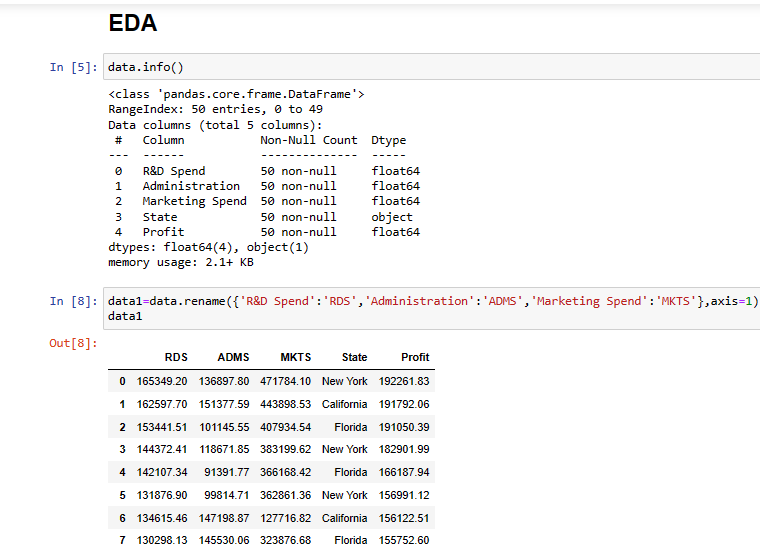
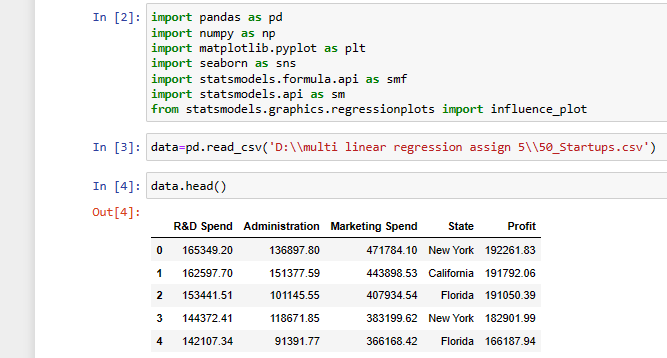
R&D Spend -- Research and devolop spend in the past few years

Administration -- spend on administration in the past few years

Marketing Spend -- spend on Marketing in the past few years

State -- states from which data is collected

Profit -- profit of each state in the past few years



Consider only the below columns and prepare a prediction model for predicting Price.

Corolla<-Corolla[c("Price","Age\_08\_04","KM","HP","cc","Doors","Gears","Quarterly\_Tax","Weight")]

Model -- model of the car

Price -- Offer Price in EUROs

Age\_08\_04 -- Age in months as in August 2004

Mfg\_Month -- Manufacturing month (1-12)

Mfg\_Year -- Manufacturing Year

KM -- Accumulated Kilometers on odometer

Fuel\_Type -- Fuel Type (Petrol, Diesel, CNG)

HP -- Horse Power

Met\_Color -- Metallic Color? (Yes=1, No=0)

Color -- Color (Blue, Red, Grey, Silver, Black, etc.)

Automatic -- Automatic ( (Yes=1, No=0)

cc -- Cylinder Volume in cubic centimeters

Doors -- Number of doors

Cylinders -- Number of cylinders

Gears -- Number of gear positions

Quarterly\_Tax -- Quarterly road tax in EUROs

Weight -- Weight in Kilograms

Mfr\_Guarantee -- Within Manufacturer's Guarantee period (Yes=1, No=0)

BOVAG\_Guarantee -- BOVAG (Dutch dealer network) Guarantee (Yes=1, No=0)

Guarantee\_Period -- Guarantee period in months

ABS -- Anti-Lock Brake System (Yes=1, No=0)

Airbag\_1 -- Driver\_Airbag (Yes=1, No=0)

Airbag\_2 -- Passenger Airbag (Yes=1, No=0)

Airco -- Airconditioning (Yes=1, No=0)

Automatic\_airco -- Automatic Airconditioning (Yes=1, No=0)

Boardcomputer -- Boardcomputer (Yes=1, No=0)

CD\_Player -- CD Player (Yes=1, No=0)

Central\_Lock -- Central Lock (Yes=1, No=0)

Powered\_Windows -- Powered Windows (Yes=1, No=0)

Power\_Steering -- Power Steering (Yes=1, No=0)

Radio -- Radio (Yes=1, No=0)

Mistlamps -- Mistlamps (Yes=1, No=0)

Sport\_Model -- Sport Model (Yes=1, No=0)

Backseat\_Divider -- Backseat Divider (Yes=1, No=0)

Metallic\_Rim --Metallic Rim (Yes=1, No=0)

Radio\_cassette -- Radio Cassette (Yes=1, No=0)

Tow\_Bar -- Tow Bar (Yes=1, No=0)

