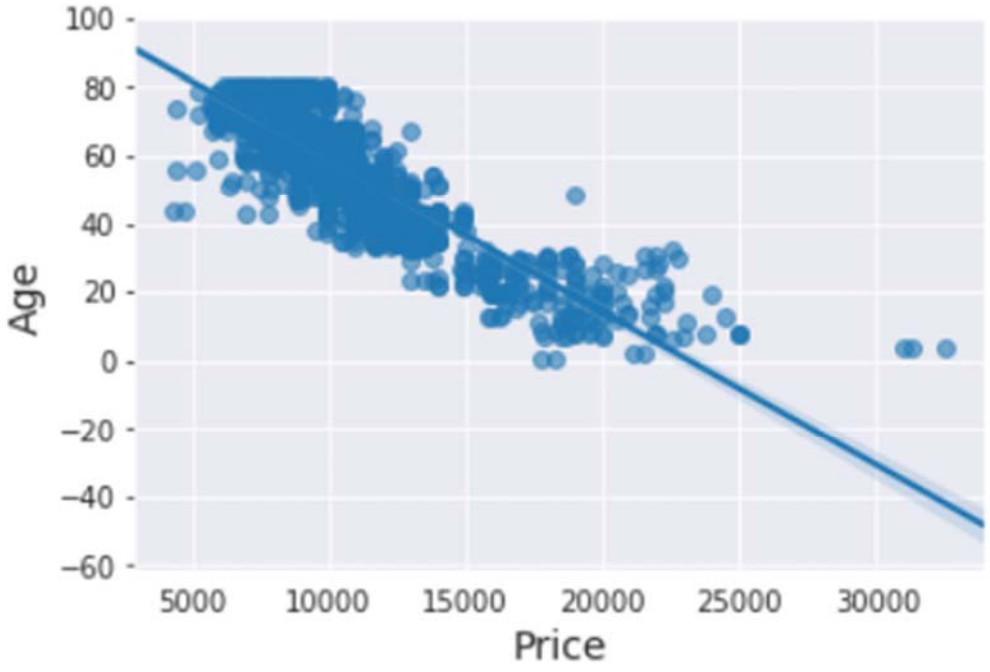
[1] How is the Age of car affecting the price of the car?

Solution:

Below is the linear regression graph. In which we can see how age of the car affecting the price of the car. This linear regression is the negative linear regression. Thus, it's the perfect negative linear regression. The picture clearly shows that price of the car is inversely proportional to the age of the car.



Age is the main factor of the car's selling price.it will directly affect the.as age of car increased the price of car will fall. There are some outliers also but they are very less. This is because of sometimes usage of car and features of car. There are various features like HP of engine, cc of engine and how much car travelled overall. The second-hand user sees all these aspects very carefully before buying it.

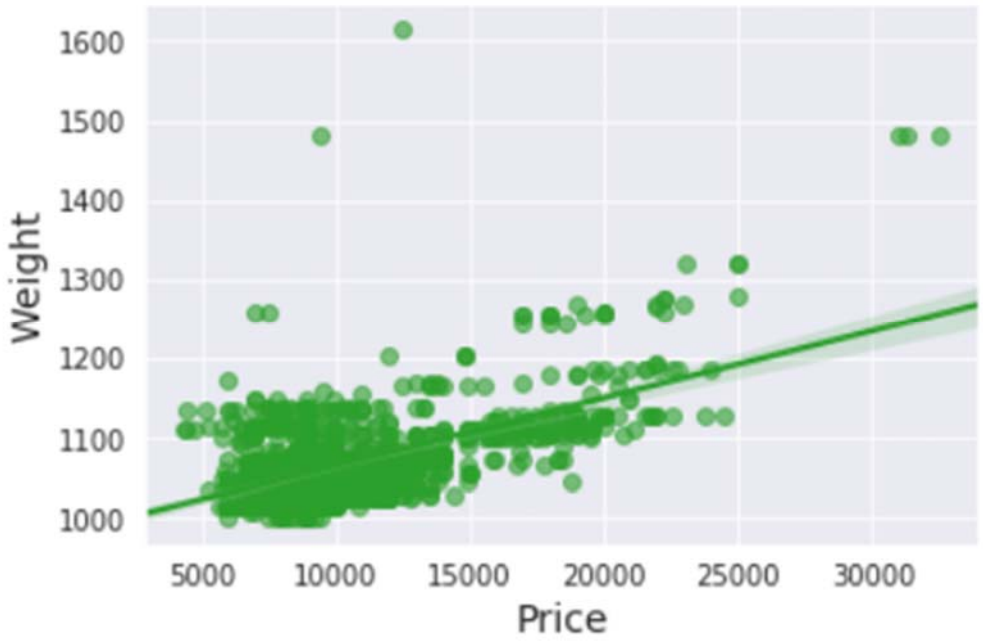
In graph we can see some points are near zero also this Is may be because of car is unable to drive i.e., trash car. Aged cars or used cars are having old types of engines which has less efficiency than new cars. Cars were originally considered as luxury purchases but the costs of manufacturing and materials has significantly reduced over the years which has made it easier for manufacturers to sell their vehicles at lower prices today.

A used car comes with its own perks. The primary benefit has to be the feeling of driving tension-free, without the jitters of getting that first dent or scratch, something only a brand-new car is prone to. You can even take it out for longer journeys as soon as you buy the car, since taking a brand-new car out for longer trips before the first service or inspection is something buyers avoid.

[2] How Is the weight of the car affecting the price of the car?

Solution:

Below is the linear regression graph. In which we can see how weight of the car affecting the price of the car. This linear regression is the positive linear regression. Thus, it's the perfect positive linear regression. The picture clearly shows that price of the car is directly proportional to the weight of the car.



A vehicle's weight is an important factor in how much fuel it will consume. The heavier the vehicle, the more energy it needs to get moving. Extra weight also increases a vehicle's rolling resistance, which is a force that resists forward motion produced as the wheels roll over the road. These improvements are leading to the use of smaller engines – without any sacrifice in performance, because less power is needed to move a lighter vehicle.

In the short term, replacing heavy steel components with materials such as high-strength steel, aluminium, or glass fibre-reinforced polymer composites can decrease component weight by 10-60 percent. Scientists already understand the properties of these materials and the associated manufacturing processes. Researchers are working to lower their cost and improve the processes for joining, modelling, and recycling these materials.

In the longer term, advanced materials such as magnesium and carbon fibre reinforced composites could reduce the weight of some components by 50-75 percent. The Office is working to increase our knowledge of these materials' chemical and physical properties and reduce their cost.