أكاديمية سدايا
SDAIA Academy

Gemstone Price Prediction

Stone Price Prediction using Regression Analysis

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Introduction

In this project we will address the subject of gemstones, specifically the stone of cubiczirconia, which is considered one of the most sought after stones, but this wonderful stone has several characteristics and according to its characteristics the price changes .

interesting to seeany machine learning techniques or continued data visualizations applied on this data set.

Data Description

carat	carat weight of the Stone
cut	cut quality of the cut (Fair, Good, Very Good, Premium, Ideal)
color	Colorstone
clarity	measurement of how clear the stone is (I1 (worst), SI2, SI1, VS2, VS1, VVS2, VVS1, IF (best))
Length	Length in mm (0—10.74)
Width	Width in mm (0—58.9)
Height	Depth in mm (0—31.8)
price	stone price in US dollars
the_size	Length* width* depth

Get this Dataset from Kaggle.com

26967 rows × 11 columns

Used Tool

- **Technologies**

Jupyter Notebook , Python

- **Libraries**

Pandas , Numpy, Matplotlibe, Seaborn , Sklearn

- **Algorithm**

  LinearRegression

  RIDGE REGRESSION

  Polynomial regression

  DecisionTreeRegressor

Questions:

- Which color is the best of selling stone?
- What is the best clarity of selling stone?
- Does the quality of stone affect its price?
- What is the highest and lowest value of the stone based on its price?