

## Introduction About the Data :

**The dataset** The goal is to predict `price` of given diamond (Regression Analysis).

There are 10 independent variables (including `id`):

- `id` : unique identifier of each diamond
- `carat` : Carat (ct.) refers to the unique unit of weight measurement used exclusively to weigh gemstones and diamonds.
- `cut` : Quality of Diamond Cut
- `color` : Color of Diamond
- `clarity` : Diamond clarity is a measure of the purity and rarity of the stone, graded by the visibility of these characteristics under 10-power magnification.
- `depth` : The depth of diamond is its height (in millimeters) measured from the culet (bottom tip) to the table (flat, top surface)
- `table` : A diamond's table is the facet which can be seen when the stone is viewed face up.
- `x` : Diamond X dimension
- `y` : Diamond Y dimension
- `z` : Diamond Z dimension

Target variable:

- `price`: Price of the given Diamond.

Dataset Source Link : <https://www.kaggle.com/competitions/playground-series-s3e8/data?select=train.csv>

For Domain Purpose <https://www.americangemsociety.org/ags-diamond-grading-system/>