

# Assignment-Regression Algorithm

Problem statement or Requirement:

1.problem statement:

**Machine learning---->Supervised learning---->Regression**

- Domain-dataset inputs are numbers, table format in excel-sheet(Machine Learning)
- Requirement is very clear & input and output are present in the dataset so, it comes under (Supervised learning)
- Output columns are numbers, so it comes under(Regression)

2.Total number or Rows-1338

Columns-6

3. Categorical column convert into Nominal data using--->**One Hot Encoding**

4. Good model of R2 value is 0.8720, using **"Random Forest-Regression Algorithm"**

5. Multilinear-Regression Algorithm→R2 value=0.7894

Supportvector machine-Regression Algorithm→R2 value=0.7590

Decision Tree-Regression Algorithm→R2value=0.7334

**Random Forest-Regression Algorithm→R2 value=0.8720**

Justify:

The above research of R2 value(Random Forest) is High compare with other Algorithms, so the Best model is **"Random Forest-Regression Algorithm→R2 value=0.8720 "**