|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Regressor Model** | **MLR** | **SVM** | **Decision Tree** | **Random Forest** |
| **Best Parameter choosen** | {'copy\_X': True, 'fit\_intercept': True, 'n\_jobs': None, 'positive': True} | {'C': 3000, 'gamma': 'scale', 'kernel': 'poly'} | {'criterion': 'friedman\_mse', 'max\_features': 'sqrt', 'splitter': 'best'} | {'criterion': 'friedman\_mse', 'max\_features': 'sqrt', 'n\_estimators': 100} |
| **R2\_Score** | 0.7894429387120755 | 0.8598930084494356 | 0.6789175895674208 | 0.8667679089037148 |
| **Best\_Parameter for explicitly not splitting train and test** | {'copy\_X': True, 'fit\_intercept': True, 'n\_jobs': None, 'positive': True} | {'C': 1000, 'kernel': 'linear'} | {'criterion': 'squared\_error', 'max\_features': 'sqrt', 'splitter': 'best'} | {'criterion': 'poisson', 'max\_features': 'sqrt', 'n\_estimators': 100} |
| **R2\_Score** | 0.749694530346479 | 0.7179049721864839 | 0.998667156135576 | 0.9762410853124038 |

**Evaluation**

**Result:**

The best model according to the above evaluation is Decision Tree with R2 Score 0.998667156135576