Predicting temperature values for the 31st day of the first month January and comparing values.A screenshot of the sample data has been provided below for comparing the values of the 31st day.

Output :

Enter the year (YYYY): 2016
Enter the month (1-12): 1
Enter the day (1-31): 31
Enter the hour (0-23): 16

Predicting temperature with Linear Regression...
Predicted temperature with Linear Regression: 24.64808977231232

Predicting temperature with Ridge Regression...
Predicted temperature with Ridge Regression: 24.648036262599106

Predicting temperature with Lasso Regression...
Predicted temperature with Lasso Regression: 24.34120398694251

Predicting temperature with Elastic Net...
Predicted temperature with Elastic Net: 24.476934701747112

Predicting temperature with Decision Tree Regression...
Predicted temperature with Decision Tree Regression: 31.71

Predicting temperature with Random Forest Regression...
Predicted temperature with Random Forest Regression: 31.552799999999998

Predicting temperature with Gradient Boosting Regression...
Predicted temperature with Gradient Boosting Regression: 31.343133230748276

Predicting temperature with Support Vector Regression...
Predicted temperature with Support Vector Regression: 21.753034446640388

Predicting temperature with K-Nearest Neighbors Regression...
Predicted temperature with K-Nearest Neighbors Regression: 30.945999999999998

2016	1	31	8	1.92	26.4
2016	1	31	9	4.42	31.14
2016	1	31	10	6.98	33.05
2016	1	31	11	8.08	34.39
2016	1	31	12	8.17	35.26
2016	1	31	13	6.73	35.65
2016	1	31	14	4.1	35.48
2016	1	31	15	1.85	34.65
2016	**1**	**31**	**16**	**0.38**	**32.58**
2016	1	31	17	0.02	26.99
2016	1	31	18	0	24.99
2016	1	31	19	0	23.75
2016	1	31	20	0	22.62
2016	1	31	21	0	21.6
2016	1	31	22	0	20.69
2016	1	31	23	0	19.85

Note :

The required value for the 16th hour of the 31st is 32.58 deg Celsius.
By comparing the data we can observe that the **Decision Tree Regression** gives the closest value i.e., 31.71 deg Celsius with an accuracy of 97.2% and error percentage of 2.74%.