|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Kernel=Linear** | **Kernel=rbf** | **Kernel=Poly** | **Kernel=sigmoid** |
| **Without Standardisation** | 0.895077923 | -0.057317309 | -0.050890118 | -0.057499197 |
| **With Standardisation** | -0.05569157 | -0.057418394 | -0.057103875 | -0.057209359 |
| **C=10** | -0.039644947 | -0.056807593 | -0.053667205 | -0.054719583 |
| **C=100** | 0.106468196 | -0.050726023 | -0.019802139 | -0.030453515 |
| **C=1000** | 0.780283988 | 0.006768344 | 0.266163709 | 0.18506862 |
| **C=2000** | 0.876772169 | 0.067515543 | 0.481002816 | 0.397065287 |
| **C=3000** | 0.895674469 | 0.123227566 | 0.637006422 | 0.591363021 |
| **C=3000, gamma=scale** | 0.895674469 | 0.123227566 | 0.637006422 | 0.591363021 |
| **C=3000, gamma=auto** | 0.895674469 | 0.123227566 | 0.637006422 | 0.591363021 |

**1.SUPPORT VECTOR MACHINE**

When Kernel =’precomputed’

Error: Precomputed matrix must be a square matrix. Input is a 35x5 matrix.

**2.DECISION TREE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SNO** | **Criterion** | **Max Features** | **Splitter** | **r\_score** |
| 1 | squared\_error | None | best | 0.877276343 |
| 2 | squared\_error | None | random | 0.878357136 |
| 3 | squared\_error | sqrt | best | -0.131436149 |
| 4 | squared\_error | sqrt | random | 0.598451794 |
| 5 | squared\_error | log2 | best | 0.652624915 |
| 6 | squared\_error | log2 | random | 0.713657786 |
| 7 | friedman\_mse | None | best | 0.904463263 |
| 8 | friedman\_mse | None | random | 0.860273215 |
| 9 | friedman\_mse | sqrt | best | 0.853040172 |
| 10 | friedman\_mse | sqrt | random | 0.3532335 |
| 11 | friedman\_mse | log2 | best | -1.48555078 |
| 12 | friedman\_mse | log2 | random | 0.663107303 |
| 13 | absolute\_error | None | best | 0.941580359 |
| 14 | absolute\_error | None | random | 0.807507364 |
| 15 | absolute\_error | sqrt | best | 0.239724689 |
| 16 | absolute\_error | sqrt | random | 0.745552465 |
| 17 | absolute\_error | log2 | best | 0.922111156 |
| 18 | absolute\_error | log2 | random | 0.191039928 |
| 19 | poisson | None | best | 0.922946019 |
| 20 | poisson | None | random | 0.894788568 |
| 21 | poisson | sqrt | best | 0.881143884 |
| 22 | poisson | sqrt | random | 0.04677813 |
| 23 | poisson | log2 | best | 0.00790263 |
| 24 | poisson | log2 | random | 0.763694767 |

**3.RANDOM FOREST**

|  |  |  |  |
| --- | --- | --- | --- |
| **SNO** | **Criterion** | **Max Features** | **r\_score** |
| 1 | squared\_error | sqrt | 0.377060321 |
| 2 | squared\_error | log2 | 0.377060321 |
| 3 | absolute\_error | sqrt | 0.489421459 |
| 4 | absolute\_error | log2 | 0.489421459 |
| 5 | friedman\_mse | sqrt | 0.389744919 |
| 6 | friedman\_mse | log2 | 0.389744919 |
| 7 | poisson | sqrt | 0.508075039 |
| 8 | poisson | log2 | 0.508075039 |
| 9 | Default:squared\_error | default=1.0 | 0.942261776 |