**Support Vector Machine-Salary Dataset**

|  |  |
| --- | --- |
| **Kernel** | **Accuracy** |
|  |  |
| rbfdot | 0.8541833 |
|  |  |
| polydot | 0.8462815 |
|  |  |
| tanhdot | 0.6638778 |
|  |  |
| vanilladot | 0.8462815 |
|  |  |
| laplacedot | 0.852656 |
|  |  |
| besseldot | 0.7703187 |

**Confusion Matrix**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **vanilladot** | | |  | **rbfdot** | | |  | **laplacedot** | | |
| **predict** | | |  | **predict** | | |  | **predict** | | |
| **Actual** | **<=50K** | **>50K** |  | **Actual** | **<=50K** | **>50K** |  | **Actual** | **<=50K** | **>50K** |
| **<=50k** | **10599** | **761** |  | **<=50k** | **10660** | **700** |  | **<=50k** | **10636** | **724** |
| **>50k** | **1554** | **2146** |  | **>50k** | **1496** | **2204** |  | **>50k** | **1495** | **2205** |
| **F1\_scores=0.9015438** | | |  | **F1\_scores=0.9066168** | | |  | **F1\_scores=0.9055383** | | |

**Based on above data, kernel rbfdot having highest accuracy and F1 scores, so we consider kernel rbfdot model for classification.**