**Task 1:**

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| --- | --- | --- | --- |
| Models | Base Model Accuracy | Best Model Accuracy | Best Hyperparameter |
| Logistic Regression | 82.92% | 82.92% | C: 1  class\_weight: None  fit\_intercept: True  tol: 0.001 |
| Decision Tree | 69.91% | 82.92% | criterion: entropy  max\_depth: 1  min\_samples\_leaf: 1  min\_samples\_split: 2 |
| Random Forest | 78.04% | 80.48% | max\_depth: None  min\_samples\_leaf: 2  min\_samples\_split: 2  n\_estimators: 100 |
| KNN | 78.86% | 78.86% | algorithm: auto  leaf\_size: 30  weights: uniform |
| SVM | 82.92% | 82.92% | C: 1  gamma: 0.001  kernel: linear  shrinking: True |

**Task 2:**

|  |  |  |
| --- | --- | --- |
| Model | Accuracy | Meta Model |
| Blending Ensemble | 82.92% | Logistic Regression |