TASK2:

After comparing the earlier SVM file I found that the AUC and PRC curve of the model greatly improved from

AUC earlier: 91.50%

PRC earlier : 91.94%

AUC after using best parameters: 92.16

PUC after using best parameters:92.12%

Also the precision recall value went up by 0.1%.

I thin our model performs better when fitted with best parameters

TASK 3:

After running the model on sample batch file we noticed as the sample size increases the performance increases significantly. But if we have a sample cost restraint the optimum sample size would be 6000 samples where the AUC for SCm reaches 90% and AUC for nb reached 88%

Chart, line chart

Description automatically generated

**The performance of SVM in general is better than NB model**