report Phase 4

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Preface

In this phase i should implement neural networking method for learning. So i use MLPClassifier of sklearn. In this phase i use a data frame in pandas package, it is faster than reading file and more convenient working with that.

ANN

I use MLPClassifier in this method i assign max iteration 1000 and i put two hidden layers. In first layer 50 nodes are placed and in second hidden layer 10 node placed i put differen status and compare accuracy finally i get this number, with accuracy more than 92 precent. Also some field of data are missing so i use Simple Imputer and i put mean strategy , it means it compute mean of all data then place mean in missing data and standard scalar algorithm for pre processing data. In below figure you can see result of this phase.

```
(venv) armin@armin-Lenovo-Z51-70:~/courses/data mining/project4$ python3 main.py
0.9290780141843972
```

Figure 1: accuracy of ANN