Algorithm: It has three layers of nodes. The hidden layer has 4, the input layer has 3 and the output layer has 6 neurons. During training, all the weights and biases are updated after processing single training sample and the method is called stochastic training. The update rule uses learning rate of 0.1 and momentum factor of 0.001. The code is run for 1500 epochs.

#Fold_1

```
   8    1    0    1    4    3
   1    8    0    0    0    0
   0    0   20    0    7    0
   0    0    0   27    2    2
   4    0    5    0   38    0
   0    5    0    4    1   33
False Positives
 [ 5   6   5   5  14   5]
False Negetives
 [ 9   1   7   4   9  10]
True Positives
 [ 8   8  20  27  38  33]
True Negetives
 [152 159 142 138 113 126]
Sensitivity
 [0.47058824 0.88888889 0.74074074 0.87096774 0.80851064 0.76744186]
Specificity
 [0.96815287 0.96363636 0.96598639 0.96503497 0.88976378 0.96183206]
Precision
 [0.61538462 0.57142857 0.8         0.84375    0.73076923 0.86842105]
Recall
 [0.47058824 0.88888889 0.74074074 0.87096774 0.80851064 0.76744186]
Áccuracy
[0.91954023 0.95977011 0.93103448 0.94827586 0.86781609 0.9137931 ]
FScore
[0.53333333 0.69565217 0.76923077 0.85714286 0.76767677 0.81481481]
Çohen Kappa
0.7122064174660933
```

#Fold_2

```
   9    4    0    0    4    0
   1   19    0    0    0    1
   0    0   36    0    4    0
   0    0    0   24    0    4
   1    0    0    0   36    2
   0    1    0    1    1   26
False Positives
 [2 5 0 1 9 7]
False Negetives
 [8 2 4 4 3 3]
True Positives
 [ 9 19 36 24 36 26]
True Negetives
 [155 148 134 145 126 138]
Sensitivity
 [0.52941176 0.9047619  0.9        0.85714286 0.92307692 0.89655172]
Specificity
 [0.98726115 0.96732026 1.         0.99315068 0.93333333 0.95172414]
Precision
 [0.81818182 0.79166667 1.         0.96       0.8        0.78787879]
```

```
Recall
 [0.52941176 0.9047619  0.9        0.85714286 0.92307692 0.89655172]
Áccuracy
[0.94252874 0.95977011 0.97701149 0.97126437 0.93103448 0.94252874]
FScore
[0.64285714 0.84444444 0.94736842 0.90566038 0.85714286 0.83870968]
Çohen Kappa
0.8311567541341527
```

#Fold_3

```
   6    2    0    0    4    0
   1   16    0    0    0    1
   0    0   35    0   10    0
   0    0    0   21    0    7
   3    0    3    0   31    0
   0    2    0    1    0   31
False Positives
 [ 4  4  3  1 14  8]
False Negetives
 [ 6  2 10  7  6  3]
True Positives
 [ 6 16 35 21 31 31]
True Negetives
 [158 152 126 145 123 132]
Sensitivity
 [0.5        0.88888889 0.77777778 0.75       0.83783784 0.91176471]
Specificity
 [0.97530864 0.97435897 0.97674419 0.99315068 0.89781022 0.94285714]
Precision
 [0.6        0.8        0.92105263 0.95454545 0.68888889 0.79487179]
Recall
 [0.5        0.88888889 0.77777778 0.75       0.83783784 0.91176471]
Áccuracy
[0.94252874 0.96551724 0.92528736 0.95402299 0.88505747 0.93678161]
FScore
[0.54545455 0.84210526 0.84337349 0.84       0.75609756 0.84931507]
Çohen Kappa
0.7583234609256915
```

#Fold_4

```
   5    1    0    0    3    1
   1   21    0    0    0    0
   0    0   27    0    4    0
   1    0    0   30    1    3
   2    0    1    0   37    0
   0    0    0    0    2   34
False Positives
 [ 4  1  1  0 10  4]
False Negetives
 [5 1 4 5 3 2]
True Positives
 [ 5 21 27 30 37 34]
True Negetives
 [160 151 142 139 124 134]
Sensitivity
 [0.5        0.95454545 0.87096774 0.85714286 0.925      0.94444444]
```

Specificity
 [0.97560976 0.99342105 0.99300699 1.   0.92537313 0.97101449]
Precision
 [0.55555556 0.95454545 0.96428571 1.   0.78723404 0.89473684]
Recall
 [0.5   0.95454545 0.87096774 0.85714286 0.925   0.94444444]
Áccuracy
[0.94827586 0.98850575 0.97126437 0.97126437 0.92528736 0.96551724]
FScore
[0.52631579 0.95454545 0.91525424 0.92307692 0.85057471 0.91891892]
Çohen Kappa
0.8581675904792958

#Fold_5

```
   7    4    0    0    5    0
   5   14    0    0    0    0
   0    0   23    0    6    0
   0    0    0   25    0    4
   1    0    1    0   39    2
   0    2    0    2    0   34
```
False Positives
 [6 6 1 2 11 6]
False Negetives
 [9 5 6 4 4 4]
True Positives
 [7 14 23 25 39 34]
True Negetives
 [152 149 144 143 120 130]
Sensitivity
 [0.4375   0.73684211 0.79310345 0.86206897 0.90697674 0.89473684]
Specificity
 [0.96202532 0.96129032 0.99310345 0.9862069 0.91603053 0.95588235]
Precision
 [0.53846154 0.7   0.95833333 0.92592593 0.78   0.85   ]
Recall
 [0.4375   0.73684211 0.79310345 0.86206897 0.90697674 0.89473684]
Áccuracy
[0.9137931 0.93678161 0.95977011 0.96551724 0.9137931 0.94252874]
FScore
[0.48275862 0.71794872 0.86792453 0.89285714 0.83870968 0.87179487]
Çohen Kappa
0.7730958881780023