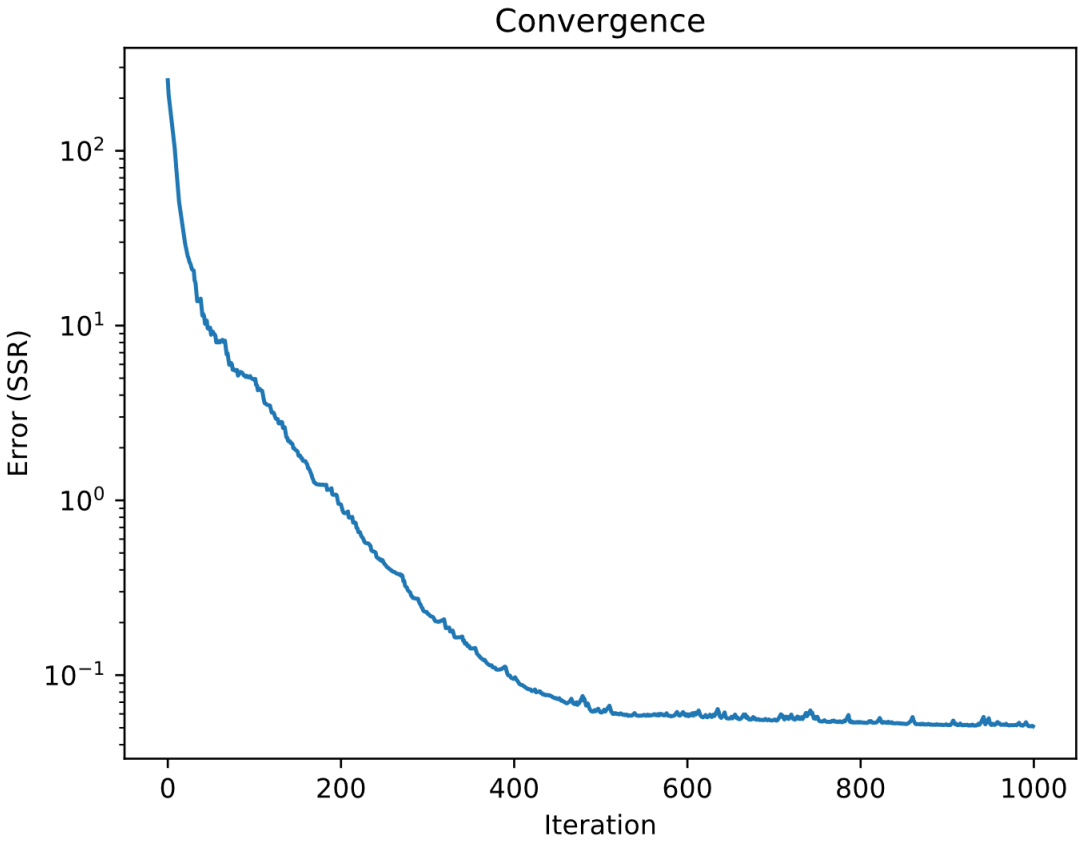


In addition to convergence plot, report the final weight vectors and predicted y value for each example:

```
Final weights connecting input to hidden layer:
      w1 = [0.36792316  1.02124575 -1.01329279]
      w2 = [0.35880968 -1.01485589  1.0140397 ]

Final weights connecting hidden layer to output:
      v = [23.82327079 -20.08466214 -20.08443503]


0 XOR 0 = 0 | y = 0.13
0 XOR 1 = 1 | y = 0.89
1 XOR 0 = 1 | y = 0.88
1 XOR 1 = 0 | y = 0.09
```

With the final weights, calculate and report the values z1 and z2 for each example in the dataset:

| x1 | x2 | z1 | z2 |
|---|---|---|---|
| 0 | 0 | 0.590957 | 0.588752 |
| 0 | 1 | 0.344034 | 0.797840 |
| 1 | 0 | 0.800460 | 0.341628 |
| 1 | 1 | 0.592878 | 0.588555 |

Use the values z1 and z2 associated with examples (0,0) and (0,1) to calculate the bias of a decision boundary with equal margins for the 2 classes. Report the margins and include a plot of feature space with the decision boundary and location of features associated with examples in the dataset:

Wrote code to perform the calculations (ref: hw7, page 2).

Bias = -1.161