

```
1 function [predicted_vector predicted_class] = find_NN(input_vector, data_matrix,N)
2
3     diff_vector = sum((input_vector(1:N) - data_matrix(:,1:N)).^2,2); %we ignore the hidden
    classifier dimension N+1
4
5     [x y] = min(diff_vector);
6
7     predicted_vector = data_matrix(y,:);
8     predicted_class = predicted_vector(N+1);
9
10 endfunction
```