

```
1  function [predicted_vector predicted_class prediction_row] = 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      prediction_row = y;  
10  
11  endfunction
```