

```
1  function [predicted_class_vector] = interp_classification(dataset, capacity, N)
2
3  num_rows = size(dataset,1);
4  max_vector = max(dataset(:,1:N));
5  min_vector = -1*max_vector;
6  weight_matrix = min_vector + rand(1,N,capacity).*(max_vector - min_vector);
7
8  class_vector = dataset(:,N+1);
9
10 sum_matrix = sum(weight_matrix.*dataset(:,1:N),2);
11
12 diff_matrix = abs(sum_matrix .- class_vector);
13 diff_matrix = sum(diff_matrix);
14
15 [diff_page] = min(diff_matrix);
16
17 weight_vector = weight_matrix(:, :, page);
18
19 interp_class_vector = sum(weight_vector.*dataset(:,1:N),2);
20
21 test_matrix = ones(num_rows,3).*[1 2 3];
22
23 answer_matrix = abs(interp_class_vector .- test_matrix);
24
25 [a predicted_class_vector] = min(answer_matrix, [], 2);
26
27 endfunction
```