ALGORITHM 4.2

```
Input:
   T      //Training data
   K      //Number of neighbors
   t      //Input tuple to classify
Output:
   c      //Class to which t is assigned
KNN algorithm:
          //Algorithm to classify tuple using KNN
   N = ∅;
            //Find set of neighbors, N, for t
   for each d ∈ T do
      if |N| ≤ K, then
         N = N ∪ {d};
      else
         if ∃ u ∈ N such that sim(t, u) ≤ sim(t, d), then
            begin
               N = N − {u};
               N = N ∪ {d};
            end
            //Find class for classification
   c = class to which the most u ∈ N are classified;
```