# Data Mining Homework 2

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Executable solutions are available and updated at https://github.com/madis/ut-data_mining

## 1 Task

1. For the data from Table 1 compute the support and support count for itemsets {Aspirin}, {Tylenol, Cepacol}, {Aspirin, Ibuprofen, Panadol}.

   - {:itemset=>[“Aspirin”], :support_count=>5, :support=>(5/12)}
   - {:itemset=>[“Tylenol”, “Cepacol”], :support_count=>4, :support=>(1/3)}
   - {:itemset=>[“Aspirin”, “Ibuprofen”, “Panadol”], :support_count=>1, :support=>(1/12)}

2. Compute the confidence for the following association rules: {Aspirin, Vitamin C} → {Sudafed}, {Aspirin} → {Vitamin C}, {Vitamin C} → {Aspirin}. Why the results for last two rules are different?

   - {{[“Aspirin”, “Vitamin_C”]=>[“Sudafed”]}=>0}
   - {{[“Aspirin”]=>[“Vitamin_C”]}=>(1/5)}
   - {{[“Vitamin_C”]=>[“Aspirin”]}=>(1/2)}