Tutorial exercises:
Sequential Pattern Analysis

Exercise 1. AprioriAll

Apply the AprioriAll algorithm to the following customer sequence dataset using minimum support s=33%. Identify the maximal sequence patterns.

S.ID	Sequence
1	<{1 5}{2}{3}{4}>
2	<{1}{3}{4}{3 5}>
3	<{1}{2}{3}{4}>
4	<{1}{3}{5}>
5	<{4}{5}>

Exercise 2. GSP

Apply the GSP algorithm to the following dataset using minimum support s=3 transactions. Show the candidates and the resulting large sequential items.

SID	Sequence
10	<a(ac)(adc)>
20	<(ba)(fb)a>
30	<(ab)bfb(ae)>
40	<a(af)d>
50	<d(fac) >
60	<(adf)(ae)>

Exercise 3. FreeSpan

Apply FreeSpan to the previous sequence database.

Exercise 4. PrefixSpan

Apply PrefixSpan to the previous sequence database.