Rule Generation

Algorithm Rule Generation of the *Apriori* algorithm

1: **for** each frequent k-itemset f_k **do**
2: $H_1 = \{i | i \in f_k\}$ {1-item consequentes of the rule.}
3: **call** ap-genrules(f_k, H_1)
4: **end for**

Algorithm Procedure ap-genrules(f_k, H_m)

1: $k = |f_k|$ {size of frequent itemset.}
2: $m = |H_m|$ {size of rule consequent.}
3: **if** $k > m$ **then**
4: **for** each $h_m \in H_m$ **do**
5: $conf = \sigma(f_k)/\sigma(f_k - h_m)$.
6: **if** $conf \geq minconf$ **then**
7: **output** the rule $f_k - h_m \longrightarrow h_m$.
8: **else**
9: **delete** h_m from H_m.
10: **end if**
11: **end for**
12: H_{m+1} = candidate-gen(H_m).
13: H_{m+1} = candidate-prune(H_{m+1}, H_m).
14: **call** ap-genrules(f_k, H_{m+1}).
15: **end if**