# A Sample of outputs from DataGen

DataGen allows exporting the log file, that user can see during mining. It contains information about loading and analysis. Also the graphs that are built over generated metadata can be exported, these include the charts of fitness function values, individual metrics from which the fitness function was build and comparison of multiplicities of genetic operators in each generation.

## A.1 Log file

*********** D A T A G E N ************
==> LOG FILE <==
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Date and time of start: 04/20/2014, 22:46:34
22:46:49 28. 04/20/2014
File is ready for analysis:
Generation of genotype lasted: 0 hr, 0 min, 0 sec, 81 ms
Number of attributes: 37
Number of instances: 4627
22:47:11 04/20/2014
Rules extraction has been successful:
Rule extraction lasted: 0 hr, 0 min, 2 sec, 547 ms
Number of generations: 20

Size of population: 30

Weight of confidence: 4

Weight of j-Measure: 8

Weight of comprehensibility: 1

Probability of mutation: 10

#### **GENERATED RULES:**

#### 1. RULE: Fitness = 1,00738835618215

baby needs in (FALSE) and bread and cake in (TRUE) and juice-sat-cord-ms in (FALSE) and tea in (FALSE) and biscuits in (FALSE) and cigs-tobacco pkts in (TRUE) and cigarette cartons in (FALSE) and cleaners-polishers in (TRUE) and sauces-gravy-pkle in (FALSE) and confectionary in (FALSE) and spices in (FALSE) and jams-spreads in (FALSE) and tissues-paper prd in (TRUE) and wrapping in (FALSE) => coffee in (FALSE) and dishcloths-scour in (FALSE) and pet foods in (TRUE) and laundry needs in (FALSE) and pkt-canned soup in (FALSE) and health&beauty misc in (FALSE)

#### 2. RULE: Fitness = 0,638575488792696

juice-sat-cord-ms in (FALSE) and tea in (FALSE) and biscuits in (FALSE) and cigs-tobacco pkts in (TRUE) and cigarette cartons in (FALSE) and cleaners-polishers in (TRUE) and sauces-gravy-pkle in (FALSE) and confectionary in (FALSE) and spices in (FALSE) and jams-spreads in (FALSE) and tissues-paper prd in (TRUE) and wrapping in (FALSE) => coffee in (FALSE) and dishcloths-scour in (FALSE) and razor blades in (FALSE) and pet foods in (TRUE) and laundry needs in (FALSE) and pkt-canned soup in (FALSE)

#### 3. RULE: Fitness = 0,624878464838243

juice-sat-cord-ms in ( FALSE ) and tea in ( FALSE ) and biscuits in ( FALSE ) and cigs-tobacco pkts in ( TRUE ) and cigarette cartons in ( FALSE ) and cleaners-polishers in ( TRUE ) and sauces-gravy-pkle in ( FALSE ) and confectionary in ( FALSE ) and spices in ( FALSE ) and jams-spreads in ( FALSE ) and tissues-paper prd in ( TRUE ) and

wrapping in (FALSE) => coffee in (FALSE) and dishcloths-scour in (FALSE) and pet foods in (TRUE) and laundry needs in (FALSE) and pkt-canned soup in (FALSE)

#### 4. RULE: Fitness = 0,623215276197977

baby needs in ( FALSE ) and bread and cake in ( TRUE ) and juice-sat-cord-ms in ( FALSE ) and biscuits in ( TRUE ) and coffee in ( TRUE ) and sauces-gravy-pkle in ( FALSE ) and confectionary in ( FALSE ) and insecticides in ( TRUE ) and tissues-paper prd in ( TRUE ) and wrapping in ( FALSE ) => tea in ( FALSE ) and cigs-tobacco pkts in ( FALSE ) and dishcloths-scour in ( FALSE ) and frozen foods in ( TRUE ) and spices in ( FALSE ) and jams-spreads in ( FALSE ) and pet foods in ( TRUE ) and laundry needs in ( FALSE ) and pkt-canned soup in ( FALSE ) and health&beauty misc in ( FALSE )

#### 5. RULE: Fitness = 0,609529447929022

juice-sat-cord-ms in (FALSE) and biscuits in (TRUE) and coffee in (TRUE) and sauces-gravy-pkle in (FALSE) and confectionary in (FALSE) and insecticides in (TRUE) and tissues-paper prd in (TRUE) and wrapping in (FALSE) => tea in (FALSE) and cigs-tobacco pkts in (FALSE) and dishcloths-scour in (FALSE) and frozen foods in (TRUE) and spices in (FALSE) and jams-spreads in (FALSE) and pet foods in (TRUE) and laundry needs in (FALSE) and pkt-canned soup in (FALSE)

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### A.2 Visualization of metadata generated during mining











