VERSION 0301

Instructions for Employee Record Program

OVERVIEW

The Employee Record Program (ERP) is designed to hold records on many employees. Each employee can be uniquely identified by the coded ID attribute. The program holds the following information attributes on each employee:

# ID (coded)

# Gender

# Age

# Sales (how many sales they have made)

# BMI (body mass index)

# Income (daily dollars)

Records can be added to ERP by supplying information from a text file, or by using ERP. Records can be altered, examined, and deleted in ERP. Records can be saved to a text file, which will be in the same format ready to supply for the next use of ERP.

ID RULES: [A-Z][0-9]{3}

All IDs specified by a user must contain 4 characters; the first must be a letter, and the others must be numerals. Each record must be uniquely identifiable, therefore ERP is restricted to hold a maximum of 26000 records. When requesting a record in ERP, the ID must be specified, and if a record has the matching ID then the request is granted. Note that specifying the ID “a001” would return a record with ID “A001”, as insertion of a record with ID “a001” would set its ID as “A001”.

In the case of attempting to insert a record with no ID or an ID that already belongs to another record in ERP, then one of three outcomes can happen – the chosen outcome can be set in the OPTIONS (more detail on OPTIONS afterwards):

1. The insertion is rejected.

or

1. The insertion is assigned an ID automatically.

or, only in the case of specified ID

1. The existing record that already has the specified ID is deleted and the insertion continues.

GENDER RULES: (M|F)

Employees are either male or female. When inserting data, it is sufficient to specify male with the letter “M”, and to specify female with the letter “F”; lower case letters can be used, and the capital letter will be stored in the record. If no gender is specified for a record insertion, the insertion will get rejected. There is no default gender for inserting records.

BMI RULES: (Normal|Overweight|Obesity|Underweight)

Please specify from the stated options the BMI when setting the BMI of an employee record: In ERP the BMI of a record can be changed. When specifying the BMI, any mixture of upper and lower case letters can be used. The outcome of incorrectly or not specifying BMI will depend on the use case:

# On insertion of a record, it will use the default BMI.

# On adjusting the BMI of an existing record, nothing will happen.

NUMBER RULES

# Max Age: 99

# Max Sales: 999

# Max Income: 999

Only integers can be specified when setting the number attributes of a record. If the number specified exceeds the maximum for that attribute, then the maximum value will be used. If the number specified is less than 0 or not expressed in numerals, then the outcome will depend on the use case:

# On insertion of a record, 0 will be used.

# On adjusting the number attribute of an existing record, nothing will happen.