Description of generating honeywords program

# T is the empty set

No training set used in this program.

Whether every password consists of pure letter or letter and any other type or not is checked to depart as two methods.

In method 1, every password is exploded into single letter and be combined with corresponding uppercase one or lower case of primary word at first. And then, each creating words is repeated to 1000 times in case of the component of passwords are too simple passwords to bigger than the parameter *N* input in terminal and is picked *N* from the creating set. At last, some number added into head or end of the picked words.

In method 2, some number added into the head or end of the picked words for the passwords themselves is hybrid type already.

# T is the set of the 100 most common *RockYou* passwords

The different part of this case between case A is 3 passwords picked from 100 most common *RockYou* set added into head or end of the upper and lower handled words 3 times. The picked passwords picked from 100 most common *RockYou* set is handled in same way with case S before added.

# T is the full *RockYou* dataset

In this case, 3 passwords picked from *RockYou* file is added into head or end of the upper and lower handled words 3 times. And the rest part is similar with case B.