

Term Project

The optical card reader machine generates a text file similar to the one shown below

```
Cards.txt - Notepad
File Edit Format View Help
ALIA AHMET 12370401722220506580AABACADACABDBDDADBDDBCBCBBADCBACBABCBCBDBBCCAACCADA
BAMIM OSMAN 230504054AAB CACBDDCBCDACCDAADBCDABCBDBBCDABADACBACACCCBCC
MOHAMED KHTIB 230504506BBBCAABBCBCCACCCDDBDCBADCADAACBCDDDDCCBCDAAAD
ABDULKADIR SALIM 230504500AABCCACDDACCCBCCDCBABCBAADAAABBCAAAACDBBACAACCBDA
MAYYADA SAMI SHARIKH70495177283210507501BBACADBADABACBACBDDDCBCCADABBABACAACBDADCACBBDC*C
Ln 5, Col 121 100% Windows (CRLF) ANSI
```

Each line in the file corresponds to the data read from one optical card. The line format is as follows:

- 01-20 The student's name
- 21-32 The student's TC number
- 33-41 The student's ID number
- 42 The booklet type
- 43-142 The Answers of 100 MCQs

Users of the machine prepare the answer keys in another file similar to the one below:

```
AnswerKeys.txt - Notepad
File Edit Format View Help
AABACADACABDBDDADBDDBCBCBBADCBACBABCBCBDBBCCAACCADA
BBBCAABBCBCCACCCDDBDCBADCADAACBCDDDDCCBCDAAAD
Ln 3, Col 1 100% Windows (CRLF) ANSI
```

Each line in the file corresponds to the answer key of one booklet type where the first character corresponds to the booklet type (booklet type $\in \{A,B,C,D\}$) and the remaining characters are the correct chooses of the MCQ.

In this project You will create a C program to read both files and generate the Grads and Statistics files. You will be guided to develop the final software progressively and demonstrate your progress to your teaching assistant during lab sessions.

(To be revised and continued)

