* **Write a program that does the following:**
  + Read the file “fileH.txt”.
  + The lines in the file follow this pattern.
    - [Student ID]'\t'[Encrypted text]"\r\n\0"
  + Ask the user to enter an id and look for it. You can use ***strncmp*** to compare part of the string.
  + Store the ID into an array of char using ***strncpy***. Make sure to set the last index with '\0'.
  + Convert the ID into an integer using ***atoi***.
  + Get the key from the Student ID. The key is the last digit on the right + 1.
    - **Example**:
      * **ID**: 12345678. The key is 8 + 1. **Key** = 9
      * **ID**: 12345674. The key is 4 + 1. **Key** = 5
      * **ID**: 12345670. The key is 0 + 1. **Key** = 1
  + Create a char pointer and use it along with ***strchr*** to point to the '\t'.
  + Move the pointer one more address to point at the start of the encrypted text.
  + Change both the carriage return '\r' and the new line '\n' into '\0' if found. Use ***strchr***.
  + Call **decrypt**, and send the pointer you just created and the key.
  + Print the decrypted text, the ID and the key.
  + If you didn’t close the file already, make sure you close it before ending the program.
* Write the following functions:
  + Write the function ***decrypt*** that takes a string and a key (integer). The function will **subtract** the key from all of the char values in all of string’s indexes.
    - void decrypt(char\*, int);

Example runs:

|  |
| --- |
| $ **./lab10**  The encrypted text is John Smith. My ID = 400010001. Encryption key = 2 |

fileH.txt

400010001 OCTYCP"CNOC[OQPK

431102298 bX^)QJ\_N);)MX^KUN)\N]\)RW)bX^[)RM

431103181 [QW"JCXG"6"QPGU"KP"[QWT"KF

431103740 ZPV!IBWF!2!EPVCMF!TFUT!JO!ZPVS!JE

432100459 cY\_\*RK`O\*K\*;::\*SX\*cY\_\\*SN

432101521 [QW"JCXG"6"5"4"3"2"KP"[QWT"KF

432101640 ZPV!IBWF!5!4!3!2!1!JO!ZPVS!JE

432102349 cY\_\*RK`O\*>\*=\*<\*;\*:\*SX\*cY\_\\*SN

432102482 \RX#KDYH#QXPEHU#5#SRZHUV#5#WKHQ#7#WKHQ#;

432102581 [QW"JCXG"6"5"4"3"2"KP"[QWT"KF

432103330 ZPV!IBWF!2!USJQMF!TFU!JO!ZPVS!JE

432103591 [QW"JCXG"6"5"4"3"2"KP"[QWT"KF

432104808 bX^)QJ\_N)=)<);):)9)RW)bX^[)RM

433100072 \RX#KDYH#4#GRXEOH#VHW#DQG#4333#LQ#\RXU#LG

433100221 [QW"JCXG"5"FQWDNG"UGVU"KP"[QWT"KF

433100630 ZPV!IBWF!3!EPVCMF!TFUT!JO!ZPVS!JE

433100687 aW](PI^M(:(LW]JTM([M\[(QV(aW]Z(QL

433101216 `V\'OH]L'8'KV\ISL'ZL[Z'PU'`V\Y'PK

433101878 bX^)QJ\_N):)MX^KUN)\N]\)RW)bX^[)RM

433102093 ]SY$LEZI$54$XLIR$64$MR$]SYV$MH

433102407 aW](PI^M(9(LW]JTM([M\[(QV(aW]Z(QL

433102859 cY\_\*RK`O\*;\*NY\_LVO\*]O^]\*SX\*cY\_\\*SN

433104494 ^TZ%MF[J%7%ITZGQJ%XJYX%NS%^TZW%NI

433104941 [QW"JCXG"5"HQWTU"KP"[QWT"KF

433105093 ]SY$LEZI$7$XLVIIW$MR$]SYV$MH

433105343 ]SY$LEZI$8$XLVIIW$MR$]SYV$MH

433105449 cY\_\*RK`O\*<\*NY\_LVO\*]O^]\*SX\*cY\_\\*SN

433106070 ZPV!IBWF!17!UIFO!18!JO!ZPVS!JE

433106209 cY\_\*RK`O\*;\*NY\_LVO\*]O^]\*SX\*cY\_\\*SN

433106503 ]SY$LEZI$5$HSYFPI$WIXW$MR$]SYV$MH

433106805 \_U[&NG\K&7&JU[HRK&YKZY&OT&\_U[X&OJ

429101605 \_U[&NG\K&767&OT&\_U[X&OJ

430103589 cY\_\*RK`O\*<\*^R\OO]\*KXN\*dO\Y]\*SX\*cY\_\\*SN

430106682 \RX#KDYH#4#GRXEOH#VHWV#LQ#\RXU#LG

430400826 `V\'OH]L';77'PU'`V\Y'PK

431101490 ZPV!IBWF!4!POFT!JO!ZPVS!JE

432100497 aW](PI^M(988(QV(aW]Z(QL

432101200 ZPV!IBWF!311!JO!ZPVS!JE

432104727 aW](PI^M(<(;(:(9(8(QV(aW]Z(QL

432104752 \RX#KDYH#7#6#5#4#3#LQ#\RXU#LG

432105103 ]SY$LEZI$8$7$6$5$4$MR$]SYV$MH

432105166 `V\'OH]L'8'KV\ISL'ZL[Z'PU'`V\Y'PK

432111259 cY\_\*RK`O\*;\*^\SZVO\*]O^\*SX\*cY\_\\*SN

432111261 [QW"JCXG"3"VTKRNG"UGV"KP"[QWT"KF

433100096 `V\'OH]L'8'KV\ISL'ZL['HUK'8777'PU'`V\Y'PK

433100224 ^TZ%MF[J%8%ITZGQJ%XJYX%NS%^TZW%NI

433100245 \_U[&NG\K&8&JU[HRK&YKZY&OT&\_U[X&OJ

433100478 bX^)QJ\_N);)MX^KUN)\N]\)RW)bX^[)RM

433100495 \_U[&NG\K&8&JU[HRK&YKZY&OT&\_U[X&OJ

433100968 bX^)QJ\_N);)MX^KUN)\N]\)RW)bX^[)RM

433101452 \RX#KDYH#4#GRXEOH#VHWV#LQ#\RXU#LG

433101472 \RX#KDYH#4#GRXEOH#VHWV#LQ#\RXU#LG

433101595 \_U[&NG\K&7&JU[HRK&YKZY&OT&\_U[X&OJ

433101707 aW](PI^M(9(LW]JTM([M\[(QV(aW]Z(QL

433101907 aW](PI^M(9(LW]JTM([M\[(QV(aW]Z(QL

433102588 bX^)QJ\_N);)MX^KUN)\N]\)RW)bX^[)RM

433103461 [QW"JCXG"5"VJTGGU"KP"[QWT"KF

433103732 \RX#KDYH#7#WKUHHV#LQ#\RXU#LG

433103948 bX^)QJ\_N)<)]Q[NN\)RW)bX^[)RM

433104931 [QW"JCXG"5"VJTGGU"KP"[QWT"KF

433105564 ^TZ%MF[J%7%ITZGQJ%XJYX%NS%^TZW%NI

Name your file using the following naming convention:

* “Lab9\_YourFirstName\_YourLastName.c"
* Don’t forget to move to your own directory
* Compile your code and execute it.
* Show the program to your lab instructor before you leave.