**Instruction/Notes:**

**Due Date:** Saturday, Nov 27th by 11:55pm.

Assignments are to be done individually. No late assignments will be accepted.

**Submissions that do not comply with the specifications given in this document will not be marked and a zero grade will be assigned.**

Write your name and e-mail id in a comment line in on top of source file. You are required to submit a single .cpp file containing your code on Google Classroom. you should name your programing file name as L21-XXXX.cpp where L21-XXXX represents your student id.

**ATM**



- **Step 0**: Your machine gets input form user like (Name, ID, Balance, Account type) and user Id should be generated random using random function. Suppose all accounts start with an initial balance of 25000. The system should show the following top menu. Write a function that simply displays this menu.
    1. Account Info
    2. Balance
    3. Deposit
    4. Withdraw
    5. Exit
- **Step 1**: Show User Info (Name, ID, Balance, Account type)
- **Step 2**: User can request account Balance by entering option 2. Write a function to complete the following task:
    ℵ The system displays the current balance.
    ℵ If balance is below 1000, the system should display the message "Low Balance".
    ℵ Then go back to the top menu by pressing Enter.
- **Step 3**: If option menu 3, which is Deposit is selected, write a function to compete the task:
    ℵ The system should prompt the user to enter the amount. The ATM machine validates the input by verifying that the input is positive.

- ℵ If not, a warning message is displayed "invalid amount", and the user is prompted to try again, if amount is negative again, the deposit operation is terminated and the top menu is displayed again.
- ℵ If amount is positive the Balance is updated.
- **Step 4**: If option 4, which is Withdraw is selected, write a function to compete the task:
  - ℵ the ATM machine prompts the user to enter amount, then checks if user has sufficient Balance.
  - ℵ User can withdraw multiple of 500 only.
  - ℵ If the balance is insufficient, then a warning message along with user's balance is displayed.
  - ℵ The user is prompted to enter a new amount for a second time, if amount is OK withdraw operation is completed and balance is updated and menu is displayed.
  - ℵ If balance is still insufficient withdraw operation is terminated and top menu is displayed.
  - ℵ If user withdraw amount greater than 3999 then 5.3% tax will be deducted from user account, if user withdraw amount greater than 5999 then 6.8% tax will be deducted from user account and If user withdraw amount greater than 9999 then 8.4% tax will be deducted from user account.
- **Step 5**: For option exit, write a function that display a "Thank You for Using FAST Banking" message and exits/log out from user's account. If user completed a transaction and want to quit then Display "Tmhara Grade Paka ha." and if he/she want to exist without making any transaction then Display "Kanjooos Insaan!):"

Submit code with comments.


Best of Luck ☺