

## Assignment 2

### Q1. (Credit Limit Calculator)

Develop a Java application that determines whether any of several department-store customers has exceeded the credit limit on a charge account.

For each customer, the following facts are available:

- a) account number
- b) pending balance at the beginning of the month
- c) total of all items charged by the customer this month
- d) total of all credits applied to the customer's account this month
- e) allowed credit limit.

The program should input all these facts as integers, calculate the new balance (= beginning balance + charges – credits), display the new balance and determine whether the new balance exceeds the customer's credit limit. For those customers whose credit limit is exceeded, the program should display the message "Credit limit exceeded".

For eg -

Allowed Credit = 50000

total items charged = 25000

total all credit applied in this month = 10000

pending balance at the beginning of the month = 5000

new balance for next month =  $5000 + 25000 - 10000 \Rightarrow 20000 < \text{Allowed Limit}$

Allowed Credit = 20000

total items charged = 20000

total all credit applied in this month = 5000

pending balance at the beginning of the month = 10000

new balance for next month =  $10000 + 20000 - 5000 \Rightarrow 25000 > \text{Allowed Limit}$

Q2. Create an application that calculates your daily driving cost, so that you can estimate how much money could be saved by car pooling, which also has other advantages such as reducing carbon emissions and reducing traffic congestion. The application should input the following information and display the user's cost per day of driving to work:

- a) Total miles driven per day.
- b) Cost per gallon of gasoline.
- c) Average miles per gallon.
- d) Parking fees per day.
- e) Tolls per day.