



PES UNIVERSITY
(Established under Karnataka Act No. 16 of 2013)
100 Ft. Road, BSK III Stage, Bengaluru – 560 085

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Title: Problem Solving with C Laboratory		
Course code: UE19CS152		
Semester : II Semester	Section: F	Team Id: 6
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PROJECT REPORT

Problem Statement:

To generate a monthly report of credit card transactions with subtotals, merchant category along with the balance credit available.

Description:

We have designed a program to read the personal data as well as the transaction details of the card holder from a text file which performs the following functions:-

- a) To store the card holder details and his transactions for the month while reading from a file.
- b) To compute the interest generated based on the payment due date along with computation of the balance credit available.
- c) To generate a statement slip with all the details.
- d) The report is written to a text file.

C-concepts used:

- a) Array of structures to store data from the data set where each array element records individual transaction details.

- b) Variable length arrays whose length was determined during runtime by counting the number of lines of input to be taken from the file.
- c) File handling, both reading and writing to files.

Learning Outcome:

- a) Learnt how to read and write to a file.
- b) Understood the working of variable length arrays and array of structures.
- c) Learnt how to generate a professional report by writing to a file.
- d) Learnt how to collaborate and coordinate as a team.

Output Screenshots:

1. Details of card holder

```
F:\C project>gcc Credit-Debit.c
F:\C project>a
Name of the card holder:R Adithya Kumar
Address:F1 Sumana Apartments,Shanti Nagar,Bangalore-024
Phone number:9765412845
Credit Card number:35126700****1001
Statement Period:- 20/01/2020 - 19/02/2020
Total Payment Due =12829.00      Payment Due Date:-07/02/2020      Statement Generation Date:- 19/02/2020
Credit Limit=205000.00      Available Credit Limit=217829.00      Available Cash Limit=10100.00
Monthly Report generated Successfully!!
F:\C project>
```

2. File to be read from

Name: R Adithya Kumar

Address: F1 Sumana Apartments,Shanti Nagar,Bangalore-024

Phone Number: 9765412845

Credit Card Number: 35126700****1001

Payment due date: 07/02/2020

Previous month Balance: 3000.00 D

Credit Limit: 205000.00

Available Cash Limit: 10100.00

Date	Transaction_Details	Amount(Rs.)	Merchant_Category
24/01/2020	debits	739.00	MOTO
25/01/2020	credit	955.00	TRAVEL
01/02/2020	debits	1010.00	TRAVEL
03/02/2020	credit	999.00	FUEL
03/02/2020	credit	34201.00	PERSONAL
04/02/2020	debits	3400.00	RESTAURANTS
04/02/2020	debits	10010.00	TRANSPORT
07/02/2020	debits	4400.00	BOOK STORE
09/02/2020	debits	999.00	FUEL
09/02/2020	credit	432.00	TRANSPORT
10/02/2020	debits	200.00	TRANSPORT

3. File containing the generated report

Monthly_Report - Notepad
File Edit Format View Help

PLATINUM CREDIT CARD STATEMENT

R Adithya Kumar
F1 Sumana Apartments,Shanti Nagar,Bangalore-024

Phone number: 9765412845

*****PAYMENT SUMMARY*****

Total Payment Due =12829.00 Cr Statement Period:- 20/01/2020 - 19/02/2020 Payment Due Date:-07/02/2020 Statement Generation Date:- 19/02/2020

Credit Card Number:35126700****1001 Credit Limit=205000.00 Available Credit Limit=217829.00 Available Cash Limit=10100.00

Previous Balance - Payments - Credits + Purchase + Other Debit&Charges= Total Payment Due

*****ACCOUNT SUMMARY*****

SNo.	DATE	MERCHANT CATEGORY CARD No:35126700****1001	TRANSACTION	AMOUNT(Rs.) NAME: R Adithya Kumar
1.	24/01/2020	MOTO	debits	739.00 dr
2.	25/01/2020	TRAVEL	credit	955.00 cr
3.	01/02/2020	TRAVEL	debits	1010.00 dr
4.	03/02/2020	FUEL	credit	999.00 cr
5.	03/02/2020	PERSONAL	credit	34201.00 cr

Activate Windows
Go to Settings to activate W

5.	03/02/2020	PERSONAL	credit	34201.00 cr
6.	04/02/2020	RESTAURANTS	debits	3400.00 dr
7.	04/02/2020	TRANSPORT	debits	10010.00 dr
8.	07/02/2020	BOOK STORE	debits	4400.00 dr
9.	09/02/2020	FUEL	debits	999.00 dr
10.	09/02/2020	TRANSPORT	credit	432.00 cr
11.	10/02/2020	TRANSPORT	debits	200.00 dr

*****END OF STATEMENT*****

Name and Signature of the Faculty: