A Report

On

"ATM MACHINE"

Submitted to the
Department of Computer Applications

In partial fulfilment of the Course

Integrated Master of Computer Applications

Under the guidance of

Ms.G Anitha Krishnan

BY

Ann Maria K.A(IMCA-259)

Haritha T.H(IMCA-260)

Tania Shine(IMCA-261)

Alosious Sunny(IMCA-262)

DEPARTMENT OF COMPUTER APPLICATIONS
SCMS SCHOOL OF TECHNOLOGY AND MANAGEMENT
MUTTOM, ALWAYE, COCHIN - 683106

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DECLARATION

We, **Ann Maria K. A, Haritha T .H ,Tania Shine , Alosious Sunny** , hereby declare that the project work entitled **"ATM Machine"** is an authenticated work carried out by us, under the guidance of **Ms.Anitha G Krishnan** for the partial fulfillment of the course **INTEGRATED MASTER OF COMPUTER APPLICATIONS** .

We understand that detection of any such copying is liable to be punished in any way the school deems fit.

Date:01-11-2019
Place: Alwaye

NAME: Ann Maria K.A
Haritha K.A
Tania Shine
Alosious Sunny

Acknowledgement

Completion of anything requires supports from various sources. The final outcome of this assignment required a lot of guidance and assistance from many people and we extremely fortunate to have got all along the completion of our assignment work. Whatever we have done is only due to such guidance and assistance and we would not forget to thank them.

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Mr. Sashikumar who gave us the golden opportunity to do this wonderful project on the ATM Machine. It also helped us in doing a lot of Research and we came to know about so many new things .We are really thankful to them.

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Last but not the least , we would like to express our gratitude to our friends and respondents for support and willingness to spend some time with us.

Finally, my thanks go to all the people who have supported me to complete the research work directly or indirectly.

Executive Summary

Now-a day's banking sector is modernizing and expanding its hand in different financial events every day.

Fifty years ago, the ATM revolutionized financial services, changing consumer expectations and spending habits by introducing people to the ease and speed of 24/7 self-service money management. No longer tied to bankers' hours, consumers had ready access to cash whenever and wherever there was an ATM.

ATMs are convenient, allowing consumers to perform quick, self-serve transactions from everyday banking like deposits and withdrawals. We also enhanced the ATM by giving facility to make bill payments like electricity bill, mobile phone bill and to transfer money to another account.

The services offered by our ATM machine is to create an account, deposit money, withdraw money, check the available balance and to make bill payments. It also has the option through which one can easily view the details of the account.

Code

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
void pin();
```

```
void all();
void trans();
void deposit();
void withdraw();
void bal();
void bills();
void detail();
void display();
void ew();
void ph();
void transfer();
int dpin;

struct customer
{
   int account_no;
   char name[80];
   float balance;
   int pin;
};

void main()
{
int choice;
all();
}




void all()
{
int choice;
          printf("\nAccount details entry menu:\n");
          printf("1.Create\n");
          printf("2.Transactions\n");
          printf("3.Display all records\n");
          printf("4.Exit");
```

```
        printf("\nEnter your choice(1-4): ");
      scanf("%d",&choice);
      switch(choice)
      {
         case 1:
            detail();
            break;

           case 2:
                pin();
                break;

         case 3:
            display();
            break;

           case 4:
                exit(1);
                break;

          default:
            printf("\nThat is an invalid option!!!\n\n");
        }
}
void detail()
{
        struct customer c;
        FILE *f;
        f=fopen("bank","ab");

      printf("Enter your name:");
      scanf("%s",c.name);
      printf("Enter account_no : ");
      scanf("%d",&c.account_no);
      printf("Enter a pin number for your account");
      scanf("%d",&c.pin);
      printf("Confirm your pin number");
      scanf("%d",&dpin);
        c.balance = 0;
```

```
        fwrite(&c,sizeof(c),1,f);
        fclose(f);
        all();
}

void display()
{
   struct customer c;
   FILE *f;
   f=fopen("bank","rb");
   while(fread(&c,sizeof(c),1,f)==1)
    {
printf("Account No:%d\nName:%s\n",c.account_no,c.name);
    }
    fclose(f);
        all();
}

void pin()
{
        int i;
        struct customer c;
        FILE *f;
        f=fopen("bank","rb");
        printf("*****| WELCOME to SBI Bank!|*****\n\n\n");
        printf("..............................................................\n\n");
        printf("\nPin Number Verification\n");
        printf("---------------------------------\n\n");

        printf("\n__________Enter your pin:__________\n\n");
        scanf("%d",&dpin);
        while(fread(&c,sizeof(c),1,f)==1)
        {
          if(dpin==c.pin)
                {
                printf("Your pin is confirmed\n");
                trans();
                }
          else
```

```
                {
                printf("Invalid pin number\n");
                pin();
                }
        }
        fclose(f);
}


void trans()
{
        int menuOption;
         printf("Transactions\n");
         printf("----------------------------------------\n");
         printf("1)Balance\n\n2)Deposit\n\n3) Withdraw\n\n
                        4)Payment/transfers\n\n5) Exit\n\n");
         printf("----------------------------------------\n");
           printf("Enter your option(1-4)\n");
         scanf("%d",&menuOption);
        do
        {
          switch(menuOption)
                {
                   case 1:bal();
                        break;

                case 2:deposit();
                         break;

                   case 3:withdraw();
                     break;

                   case 4:bills();
                           break;

                case 5:all();
                           break;

               default:
```

```
                printf("\nThat is an invalid option!!!\n\n");
            }
        }while(1);

}

void bal()
{
        struct customer c;
        FILE *f;
        f=fopen("bank","rb");
        printf("\n_____Check
        Balance_____\n\n");
        while(fread(&c,sizeof(c),1,f)==1)
        {
          if(c.pin==dpin)
          printf("Your current balance is %f\n",c.balance);
        }
        fclose(f);
        trans();
}

void deposit()
{
        struct customer c;
        float amount;
        FILE *f;
        int number,dpin;
        f=fopen("bank","r+b");
        printf("\n_____Deposit_____\n\n");

        while(fread(&c,sizeof(c),1,f)==1)
         {
        printf("Enter the account no\n");
        scanf("%d",&number);
        if(number==c.account_no)
        {
        printf("\n_____Enter your pin:_____\n\n");
        scanf("%d",&dpin);
```

```
        if(c.pin==dpin)
        {
                printf("Enter the amount to be deposited\n");
                scanf("%f",&amount);
        c.balance+=amount;
                        if(amount>c.balance)
                        {
                        printf("Not enough money to withdraw\n");
                        }
                        else
                        {
                fseek(f,(-1)*sizeof(c),SEEK_CUR);
                fwrite(&c,sizeof(c),1,f);
                printf("Amount deposited successfully!\n");
                printf("Your current balance=%f\n",c.balance);
                        }
}
        }
        else
        {
        printf("The account no does not exsist\n");
        deposit();
        }
        }
        fclose(f);
        trans();

}


void withdraw()
{
        int dpin,number;
        struct customer c;
        float amount;
        FILE *f;
        f=fopen("bank","r+b");
        printf("\n_____Withdraw_____\n\n");
        while(fread(&c,sizeof(c),1,f)==1)
```

```
        {
                printf("Enter the account no\n");
                scanf("%d",&number);
                if(number==c.account_no)
                {
                printf("\n__________Enter your pin:__________\n\n");
                scanf("%d",&dpin);
                 if(c.pin==dpin)
                   {
                        printf("Enter the amount to be withdrawn\n");
                        scanf("%f",&amount);
                        c.balance-=amount;
                        if(amount>c.balance)
                        {
                        printf("Not enough money to withdraw\n");
                        }
                        else
                        {
                        fseek(f,(-1)*sizeof(c),SEEK_CUR);
                        fwrite(&c,sizeof(c),1,f);
                        printf("Amount deposited successfully!\n");
                     printf("Your current balance=%f\n",c.balance);
                        }
                    }
               }
                  else
                  printf("The account no does not exsist\n");
        }
        fclose(f);
        trans();
}

void bills()
{
        int dpin,no,option;
        float amount;
        printf("\n_________________Pay bills_________________\n\n");
```

```
        printf("1) Electricity bill\n\n2) Water bill\n\n3) Phone bill\n\n4)Online tranfer\n\n5) Exit\n\n");
        printf("----------------------------------------\n");
          printf("Enter your option(1-4)\n");
        scanf("%d",&option);

       do
       {
         switch(option)
              {
                 case 1:ew();
                        break;


             case 2:ew();
                        break;

                 case 3:ph();
                      break;

                 case 4:transfer();
                         break;

             case 5:
                        trans();
                break;

             default:
                    printf("\nThat is an invalid option!!!\n\n");
            }
    }while(1);

}

void ew()
{
int dpin,number,no;
        struct customer c;
        float amount;
```

```
        FILE *f;
        f=fopen("bank","r+b");
        printf("\n_____Electricity/Water Bill
        Payment_____\n\n");
        while(fread(&c,sizeof(c),1,f)==1)
         {
                printf("Enter the account no\n");
                scanf("%d",&number);
                if(number==c.account_no)
                {
                printf("\n_____Enter your pin:_____\n\n");
                scanf("%d",&dpin);
                 if(c.pin==dpin)
                        {
                        printf("Enter the consumer number\n");
                        scanf("%d",&no);
                        printf("Enter the amount to be paid\n");
                        scanf("%f",&amount);
                        c.balance-=amount;
                        if(amount>c.balance)
                        {
                        printf("Not enough money to withdraw\n");
                        }
                        else
                        {
                        fseek(f,(-1)*sizeof(c),SEEK_CUR);
                        fwrite(&c,sizeof(c),1,f);
                        printf("Bill paid sucessfully!\n");
                        printf("Your current balance=%f\n",c.balance);
                        }
                }
                else
                printf("The account no does not exsist\n");
        }
        fclose(f);
        trans();
}
}
void ph()
```

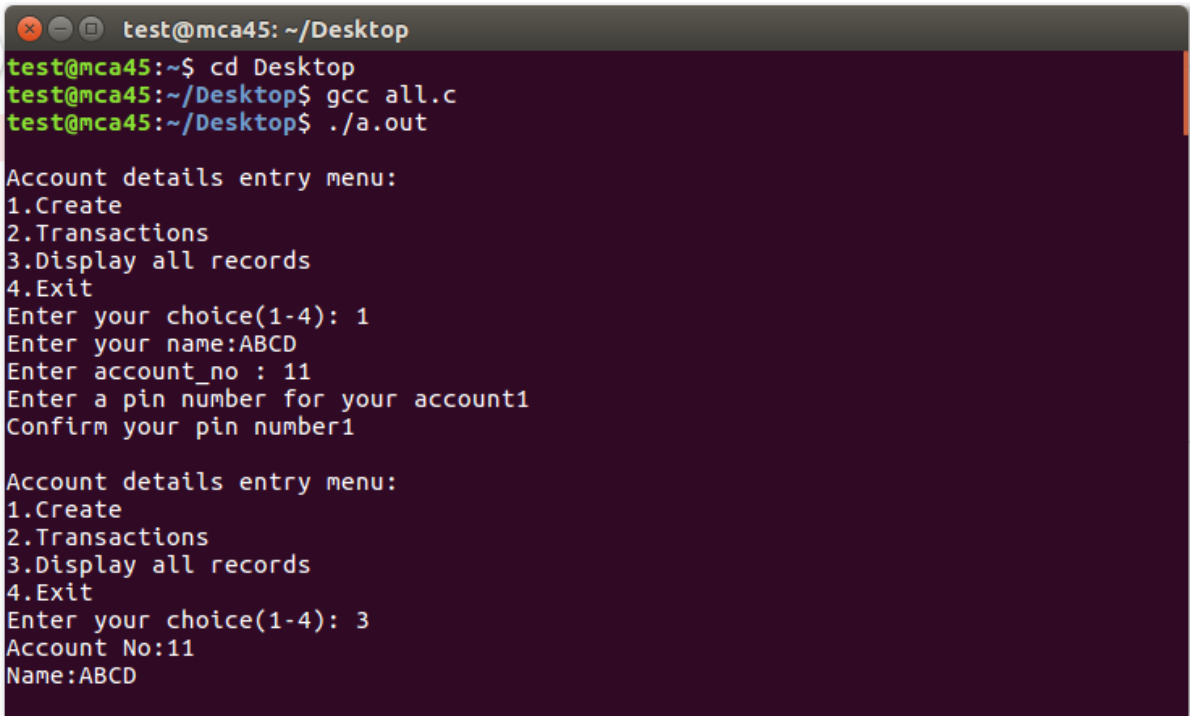
```
{
int dpin,number,no;
        struct customer c;
        float amo;
        FILE *f;
        f=fopen("bank","r+b");
        printf("\n_____Phone                                                    bill
payment_____\n\n");
        while(fread(&c,sizeof(c),1,f)==1)
         {
                printf("Enter the account no\n");
                scanf("%d",&number);
                if(number==c.account_no)
                {
                printf("\n_____Enter your pin:_____\n\n");
                scanf("%d",&dpin);
                 if(c.pin==dpin)
                  {
                        printf("Enter the phone number\n");
                        scanf("%d",&no);
                        printf("Enter the amount to be paid\n");
                        scanf("%f",&amo);
                c.balance-=amo;
                        if(amo>c.balance)
                        {
                        printf("Not enough money to withdraw\n");
                        }
                        else
                        {
                        fseek(f,(-1)*sizeof(c),SEEK_CUR);
                        fwrite(&c,sizeof(c),1,f);
                        printf("Bill paid sucessfully!\n");
                        printf("Your current balance=%f\n",c.balance);

                        }
                }
                else
                printf("The account no does not exsist\n");
                }
```

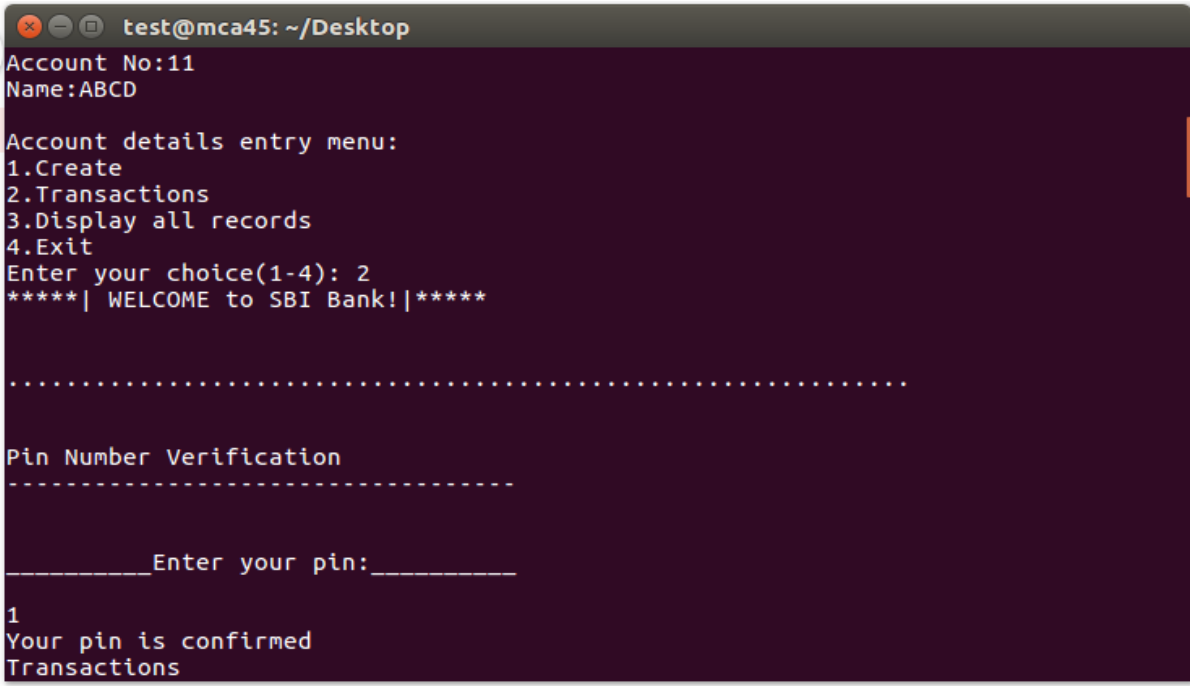
```
        }
        fclose(f);
        trans();
}


void transfer()
{
int dpin,number,no;
        struct customer c;
        float amount;
        FILE *f;
        f=fopen("bank","r+b");
        printf("\n_________________Transfer Amount_____________________\n\n");
        while(fread(&c,sizeof(c),1,f)==1)
         {
                printf("Enter the account no\n");
                scanf("%d",&number);
                if(number==c.account_no)
                {
                printf("\n___________Enter your pin:___________\n\n");
                scanf("%d",&dpin);
                 if(c.pin==dpin)
                  {
                        printf("Enter the account number to which you want to transfer
amount\n");
                        scanf("%d",&no);
                        printf("Enter the amount to be transfered\n");
                        scanf("%f",&amount);
                c.balance-=amount;
                        if(amount>c.balance)
                        {
                        printf("Not enough money to withdraw\n");
                        }
                        else
                        {
                        fseek(f,(-1)*sizeof(c),SEEK_CUR);
                        fwrite(&c,sizeof(c),1,f);
                        printf("Transfer sucessfull!\n");
```

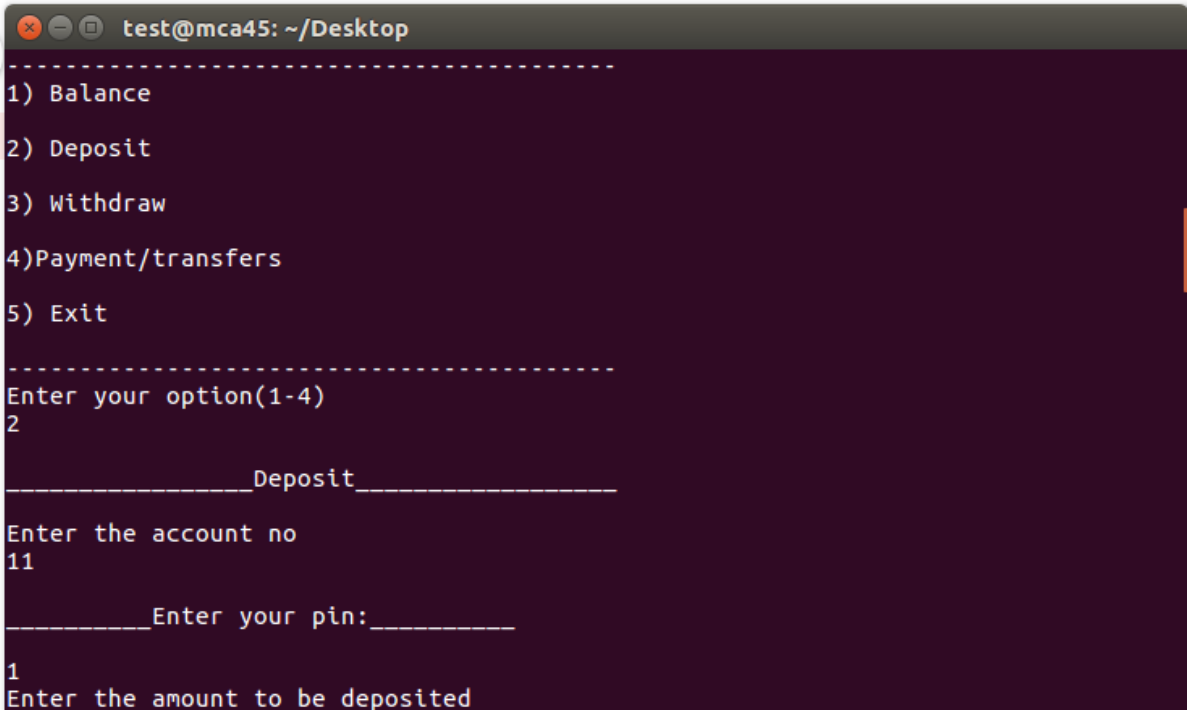
```
                printf("Your current balance=%f\n",c.balance);

                }
        }
}
        else
        printf("The account no does not exsist\n");

        }
    fclose(f);
    trans();

}
```

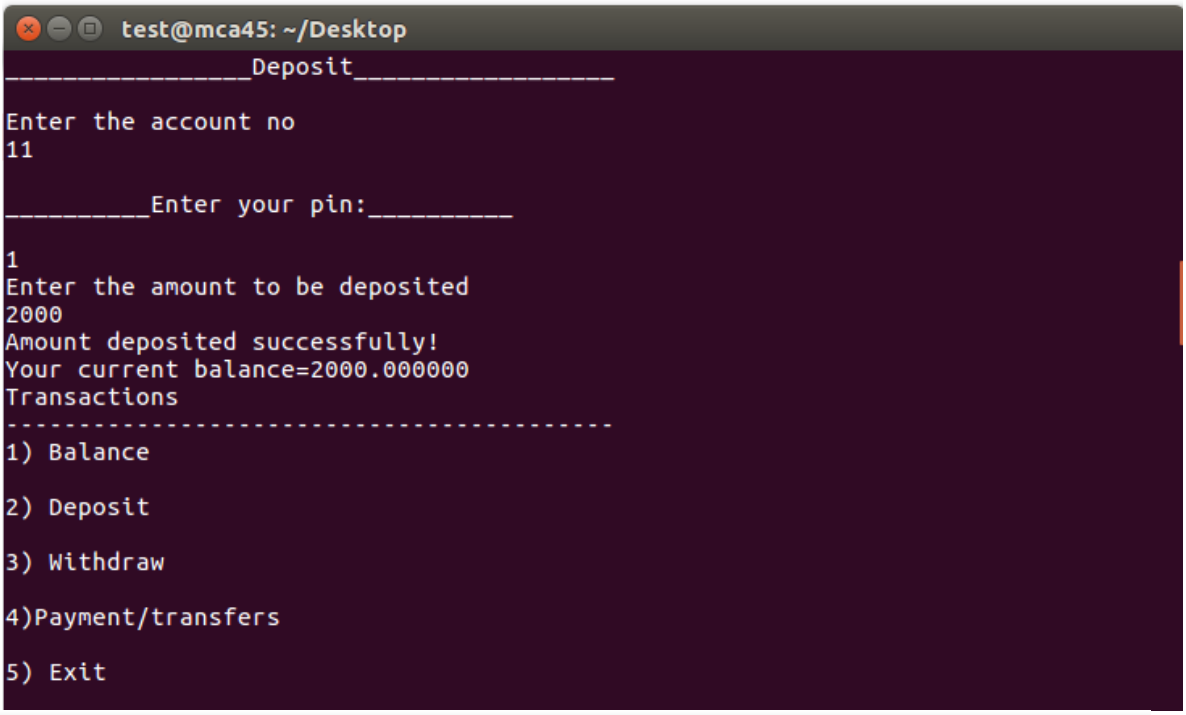
Sample Input and Output

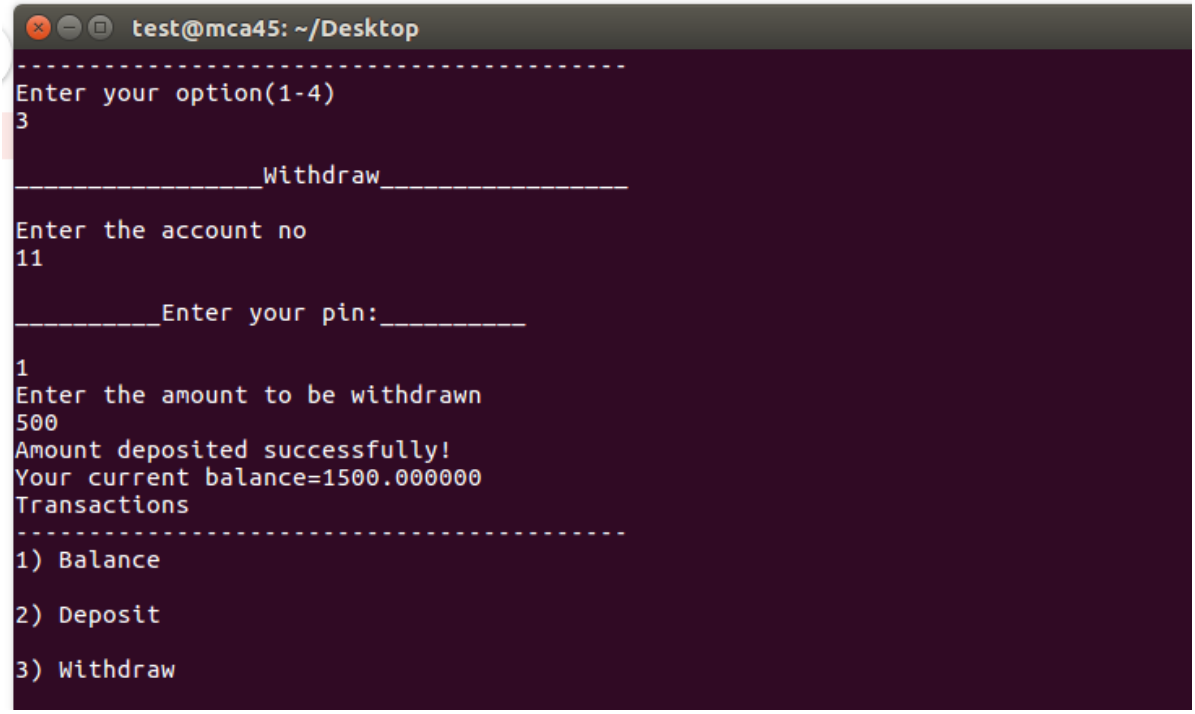
Screens

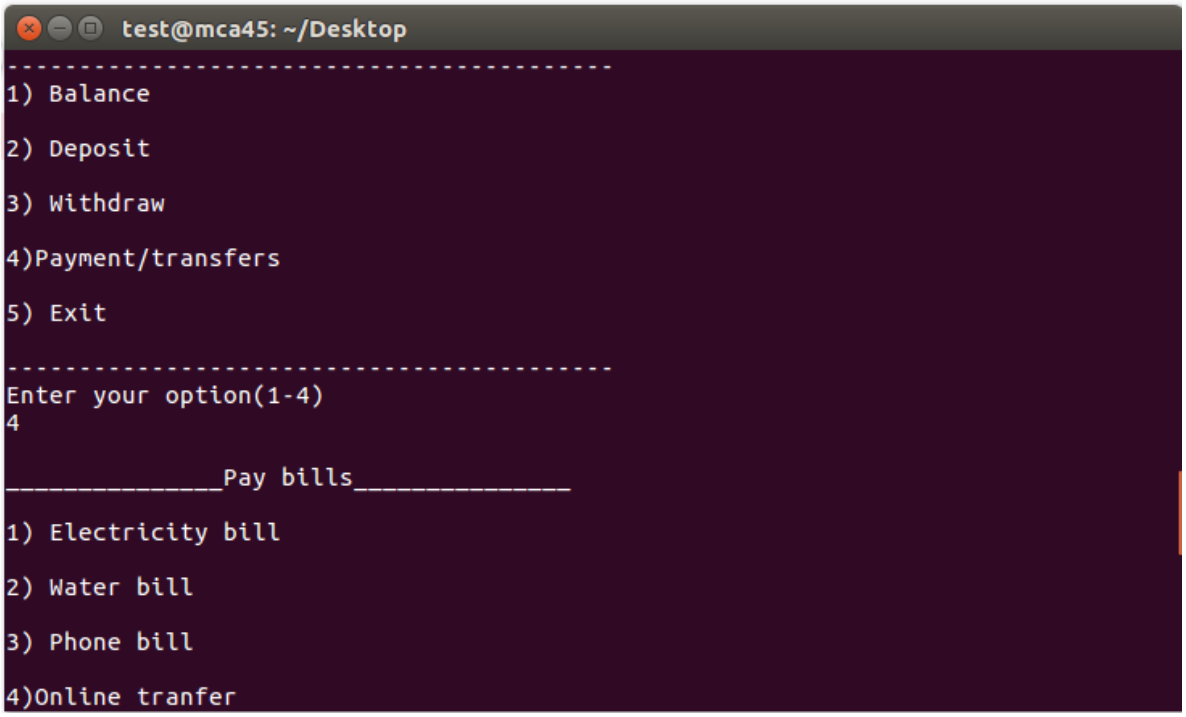



test@mca45: ~/Desktop
Account No:11
Name:ABCD
Account details entry menu:
1.Create
2.Transactions
3.Display all records
4.Exit
Enter your choice(1-4): 2
*****| WELCOME to SBI Bank!|*****
Pin Number Verification
_____Enter your pin:_____
1
Your pin is confirmed
Transactions

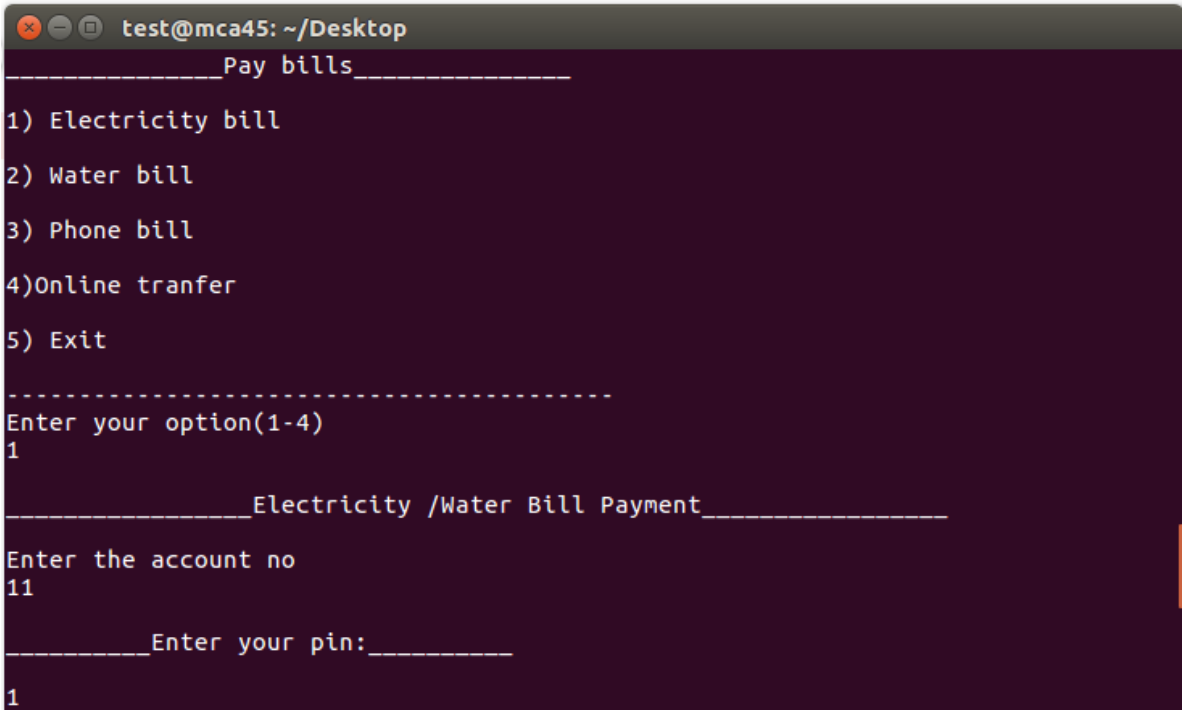

test@mca45: ~/Desktop
1) Balance
2) Deposit
3) Withdraw
4)Payment/transfers
5) Exit
Enter your option(1-4)
2
_____Deposit_____
Enter the account no
11
_____Enter your pin:_____
1
Enter the amount to be deposited


test@mca45: ~/Desktop
_____Deposit_____
Enter the account no
11
_____Enter your pin:_____
1
Enter the amount to be deposited
2000
Amount deposited successfully!
Your current balance=2000.000000
Transactions
1) Balance
2) Deposit
3) Withdraw
4)Payment/transfers
5) Exit

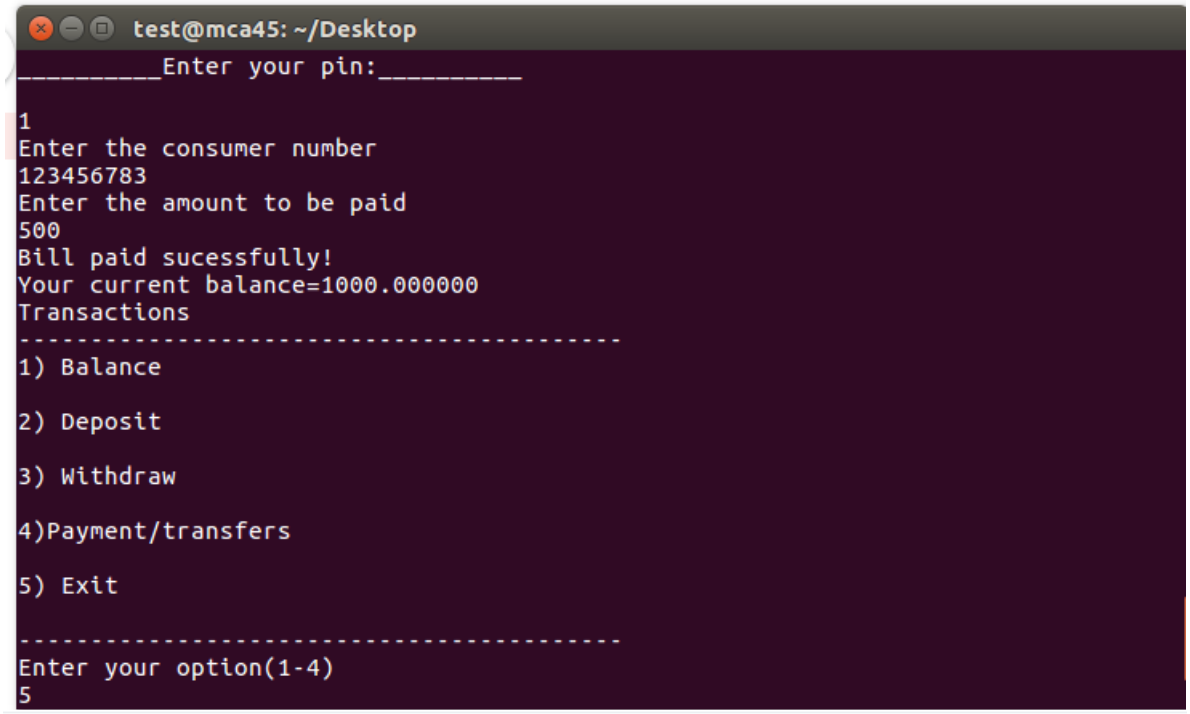

test@mca45: ~/Desktop
Enter your option(1-4)
3
_____Withdraw_____
Enter the account no
11
_____Enter your pin:_____
1
Enter the amount to be withdrawn
500
Amount deposited successfully!
Your current balance=1500.000000
Transactions
1) Balance
2) Deposit
3) Withdraw

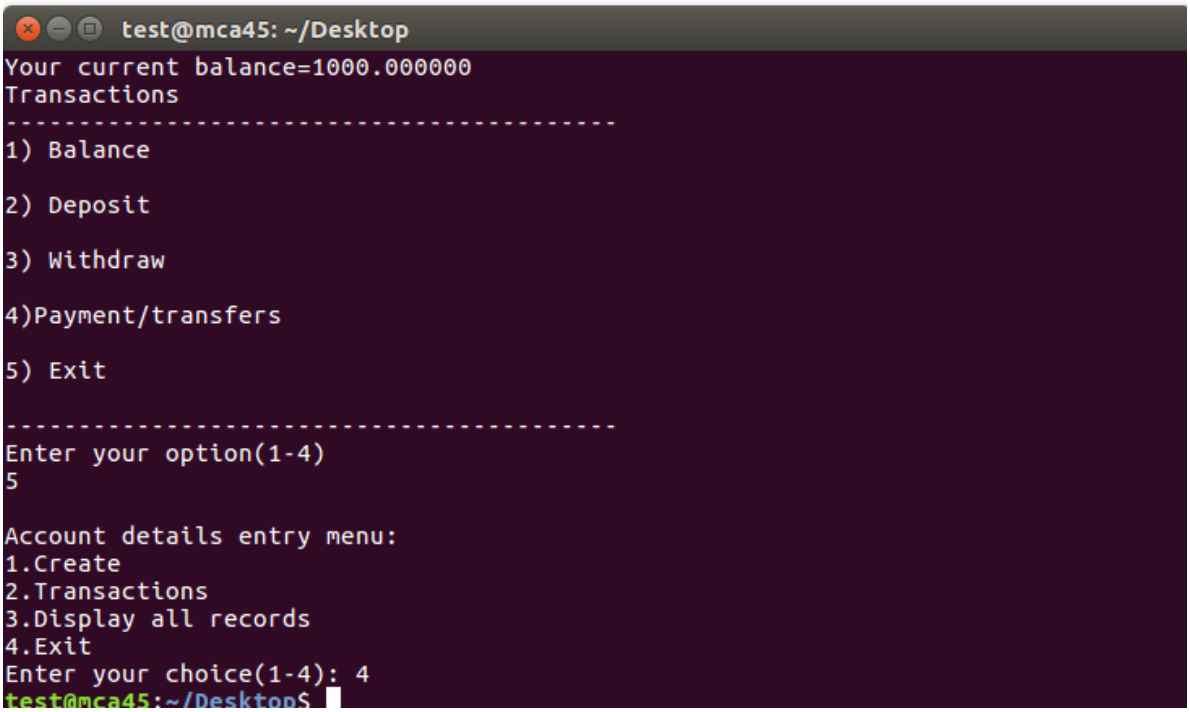

test@mca45: ~/Desktop
----
1) Balance
2) Deposit
3) Withdraw
4)Payment/transfers
5) Exit

Enter your option(1-4)
4
_____Pay bills_____
1) Electricity bill
2) Water bill
3) Phone bill
4)Online tranfer


test@mca45: ~/Desktop
_____Pay bills_____
1) Electricity bill
2) Water bill
3) Phone bill
4)Online tranfer
5) Exit

Enter your option(1-4)
1
_____Electricity /Water Bill Payment_____
Enter the account no
11
_____Enter your pin:_____
1


test@mca45: ~/Desktop
_____Enter your pin:_____
1
Enter the consumer number
123456783
Enter the amount to be paid
500
Bill paid sucessfully!
Your current balance=1000.000000
Transactions
1) Balance
2) Deposit
3) Withdraw
4)Payment/transfers
5) Exit
Enter your option(1-4)
5


test@mca45: ~/Desktop
Your current balance=1000.000000
Transactions
1) Balance
2) Deposit
3) Withdraw
4)Payment/transfers
5) Exit
Enter your option(1-4)
5
Account details entry menu:
1.Create
2.Transactions
3.Display all records
4.Exit
Enter your choice(1-4): 4
test@mca45:~/Desktop$

Conclusion and Future Enhancements

We hereby create a program based on the working of an ATM Machine. In this project we have included the options in the current scenario as well as enhanced the capability by allowing the person to make bill payments and transfer money to another account.

In the future,the performance can be increased in the terms of speed and memory. A speaking voice alarms can also be implemented in the future to indicate unauthorized person accessing the ATM. The system can be made to communicate with modems and mobile phones.

Though ATM industry is growing rapidly,there are many challenges related to security issues of the software. Few banks have introduced biometric ATMs in rural India ,which are quite secure and easy to use by a common man.

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