Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering
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Course Title: Data Structures
Course Code: CSE - 106 Section: DA

Lab Project Name: Banking Management System

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[For Teachers use only: Don't Write Anything inside this box]

Lab Project Status

Marks: …… **Signature: .....**

Comments: ..... **Date: .....**

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Chapter 1

Introduction

1.1 Introduction

A bank management system ensures proper supervision of the processes of banking to maximize profit.Banking Management system is an Ai tool where a banker can manage his/her clients banking information and valuable data.

1.2 Objective

The main objective of bank management is to maximize the profit of the bank maintaining proper management of liquidity, asset, liability and capital adequacy.

- To improve customer service.
- To mordernize office equipments.
- To improve overall health of bank.
- To improve human resources of bank.

Chapter 2

Development of the Project

```
#include <stdio.h>
#include <conio.h>
#include <string.h>
#include<stdlib.h>


struct acc_type
{
    char bank_name[20];
    char bank_branch[20];
    char acc_holder_name[50];
    int acc_number;
    char acc_holder_address[100];
    float available_balance;
};
struct acc_type account[20];

int num_acc;
void Create_account();
void Cash_deposit();
void Cash_withdrawal();
void Account_information();
void Log_out();
void display_options();


void display_options()
{
   printf("\n1. Create New Account\n2. Cash Deposit\n3. Cash withdrawal\n4. Account information\n5. Log out\n6. Clear the
screen and display available options\n\n");
}


void Create_account()
{
  char bank_name[20];
  char bank_branch[20];
  char acc_holder_name[30];
  int acc_number;
  char acc_holder_address[100];
  float available_balance = 0;

  printf("\nEnter the bank name             : ");
  scanf("%s", &bank_name);
  printf("\nEnter the bank branch           : ");
  scanf("%s", &bank_branch                  );
  printf("\nEnter the account holder name    : ");
```

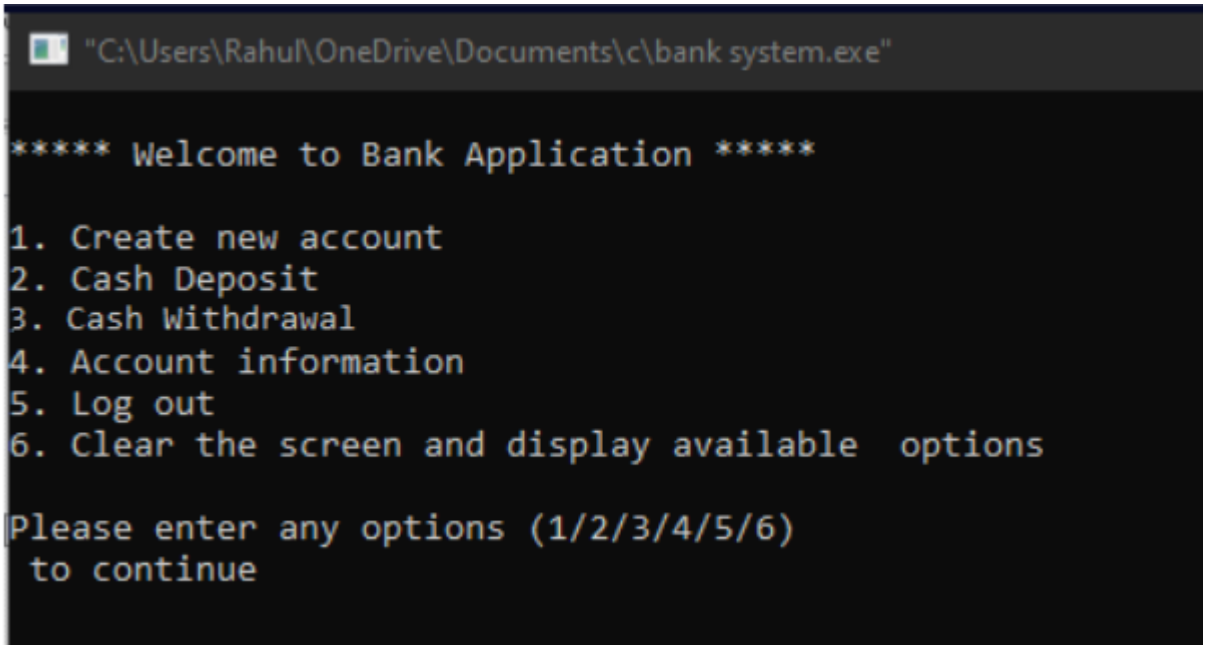
```
  scanf("%s", &acc_holder_name);
  printf("\nEnter the account number(1 to 10): ");
  scanf("%d", &acc_number);
  printf("\nEnter the account holder address : ");
  scanf("%s", &acc_holder_address);

  strcpy(account[acc_number-1].bank_name,bank_name);
  strcpy(account[acc_number-1].bank_branch,bank_branch);
  strcpy(account[acc_number-1].acc_holder_name,
  acc_holder_name);
  account[acc_number-1].acc_number=acc_number;
  strcpy(account[acc_number-1].acc_holder_address,
  acc_holder_address);
  account[acc_number-1].available_balance=available_balance;

  printf("\nAccount has been created successfully \n\n");
  printf("Bank name             : %s \n" ,
  account[acc_number-1].bank_name);
  printf("Bank branch           : %s \n" ,
  account[acc_number-1].bank_branch);
  printf("Account holder name   : %s \n" ,
  account[acc_number-1].acc_holder_name);
  printf("Account number        : %d \n" ,
  account[acc_number-1].acc_number);
  printf("Account holder address : %s \n" ,
  account[acc_number-1].acc_holder_address);
  printf("Available balance     : %f \n" ,
  account[acc_number-1].available_balance);

  printf("\nThanks to create a new account. \n");
}


void Account_information()
{
    int num_acc = 0;

   while(strlen(account[num_acc].bank_name)>0)
   {
      printf("\nBank name               : %s \n" ,
      account[num_acc].bank_name);
      printf("Bank branch             : %s \n" ,
      account[num_acc].bank_branch);
      printf("Account holder name     : %s \n" ,
      account[num_acc].acc_holder_name);
      printf("Account number          : %d \n" ,
      account[num_acc].acc_number);
      printf("Account holder address  : %s \n" ,
      account[num_acc].acc_holder_address);
      printf("Available balance       : %f \n\n" ,
      account[num_acc].available_balance);
      num_acc++;
   }
}
```

```
void Cash_deposit()
{
   int acc_no;
  float add_money;

  printf("Enter account number you want to deposit money:");
  scanf("%d",&acc_no);
  printf("\nThe current balance for account %d is %f \n",
  acc_no, account[acc_no-1].available_balance);
  printf("\nEnter money you want to deposit :  ");
  scanf("%f",&add_money);

  while (acc_no=account[acc_no-1].acc_number)
  {
       account[acc_no-1].available_balance=
       account[acc_no-1].available_balance+add_money;
       printf("\nThe New balance for account %d is %f \n",
       acc_no, account[acc_no-1].available_balance);
       break;
  }acc_no++;
}



void Cash_withdrawal()
{
   int acc_no=0;
  float withdraw_money;

  printf("Enter account number you want to withdraw money:");
  scanf("%d",&acc_no);
  printf("\nThe current balance for account %d is %f \n",
  acc_no, account[acc_no-1].available_balance);
  printf("\nEnter money you want to withdraw from account ");
  scanf("%f",&withdraw_money);

  while (acc_no=account[acc_no-1].acc_number)
  {
       account[acc_no-1].available_balance=
       account[acc_no-1].available_balance-withdraw_money;
       printf("\nThe New balance for account %d is %f \n",
       acc_no, account[acc_no-1].available_balance);
       break;
  }acc_no++;
}




int main()
{
   char option;
```

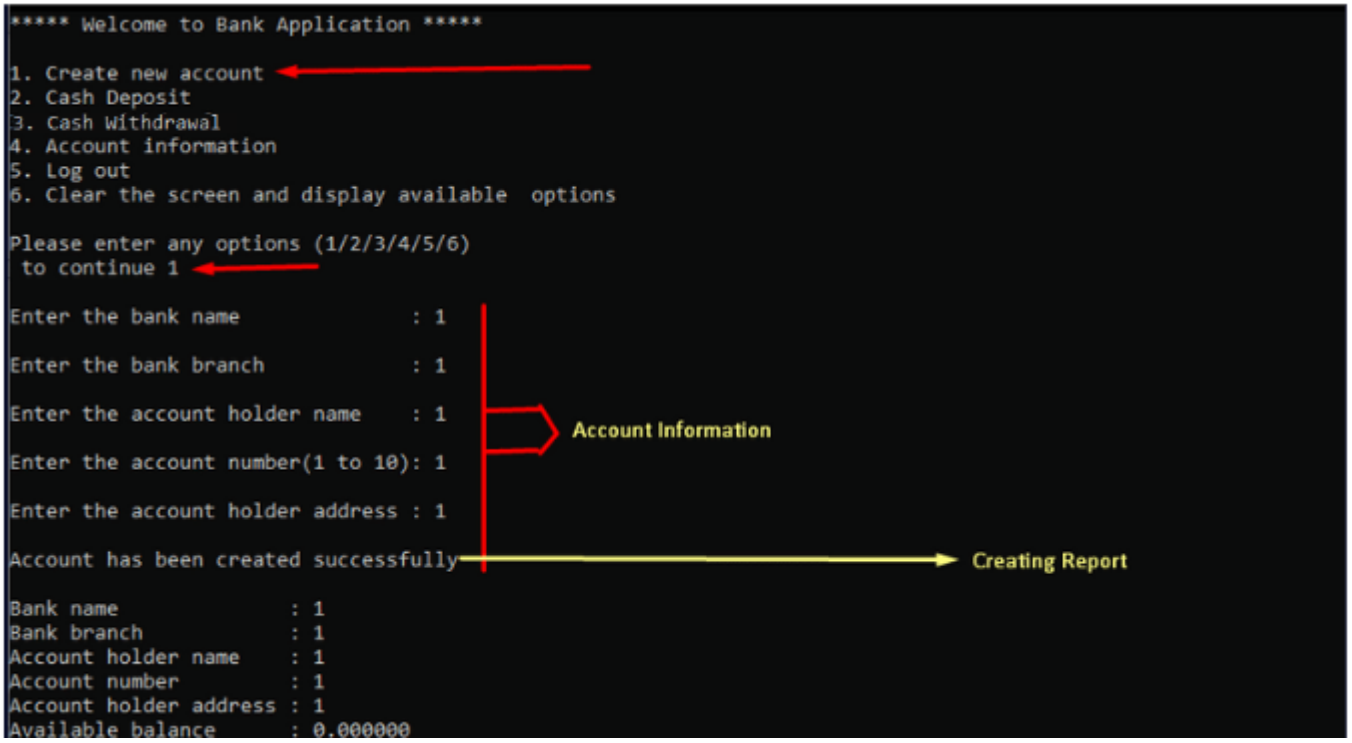
```
   while(1)
   {
     printf("\n***************************************\n");
     printf("\n***** Welcome to Bank Application *****\n");
     printf("\n***************************************\n");

     display_options();
     printf("Please enter any option you want to continue: ");


      option = getch();
      printf("%c \n", option);
      switch(option)
      {
        case '1': Create_account();
                  break;
        case '2': Cash_deposit();
                  break;
        case '3': Cash_withdrawal();
                  break;
        case '4': Account_information();
                  break;
        case '5': return 0;
        case '6': system("cls");
                  break;
        default : system("cls");
                  printf("Please enter one of the options");
                  break;
      }
   }
   return 0;
}
```

Chapter 3

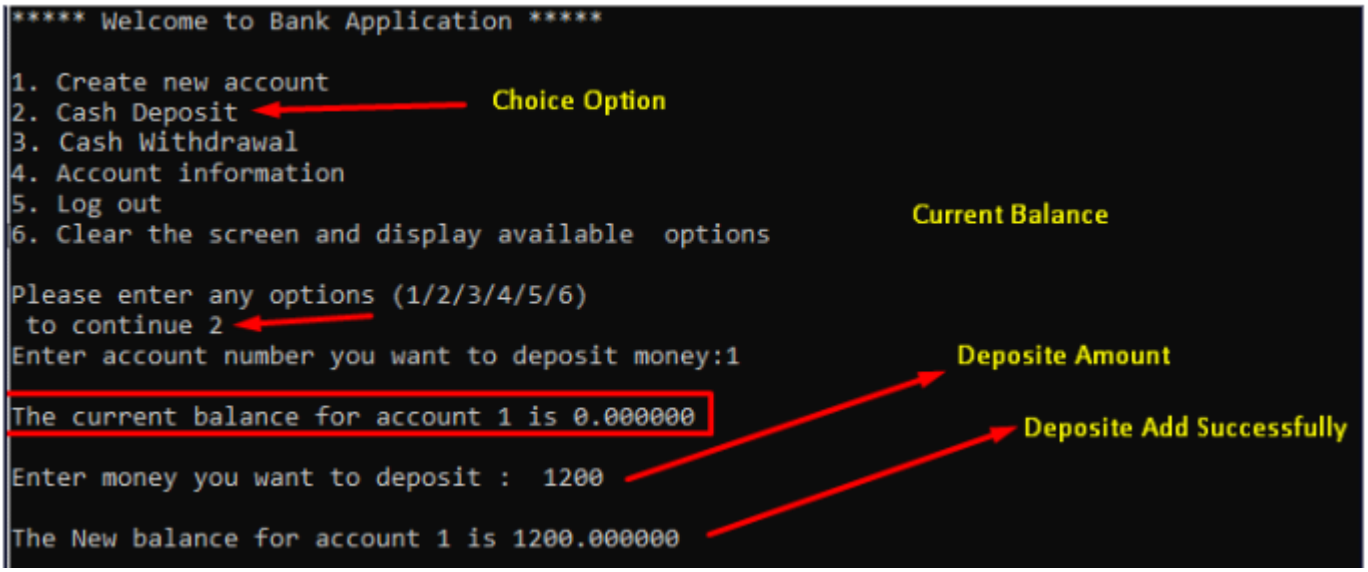
Performance Evaluation



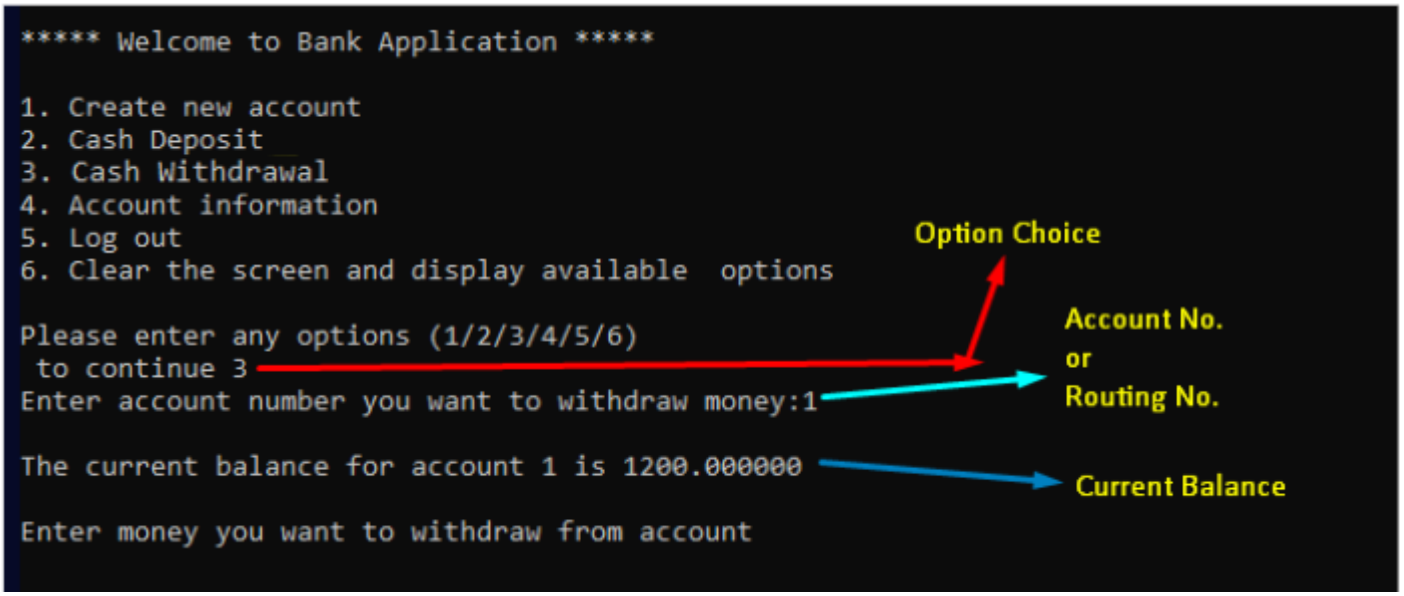
Main menu



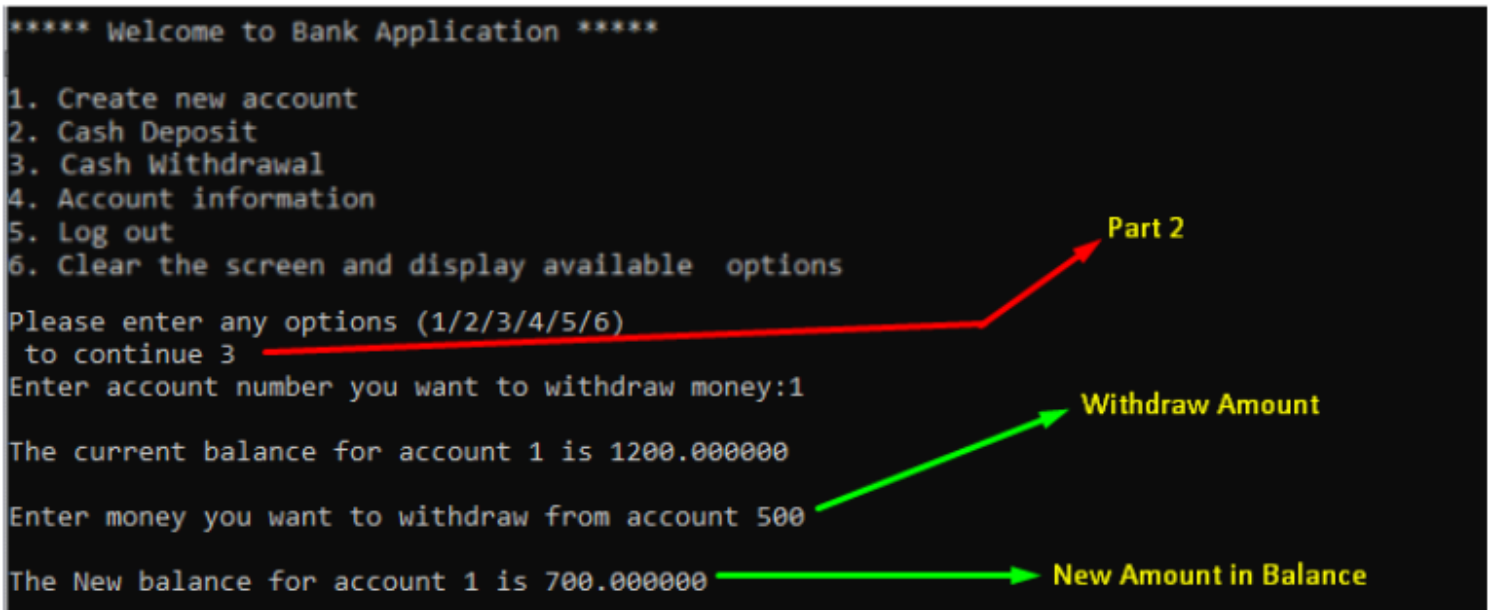
Process of an account creation.



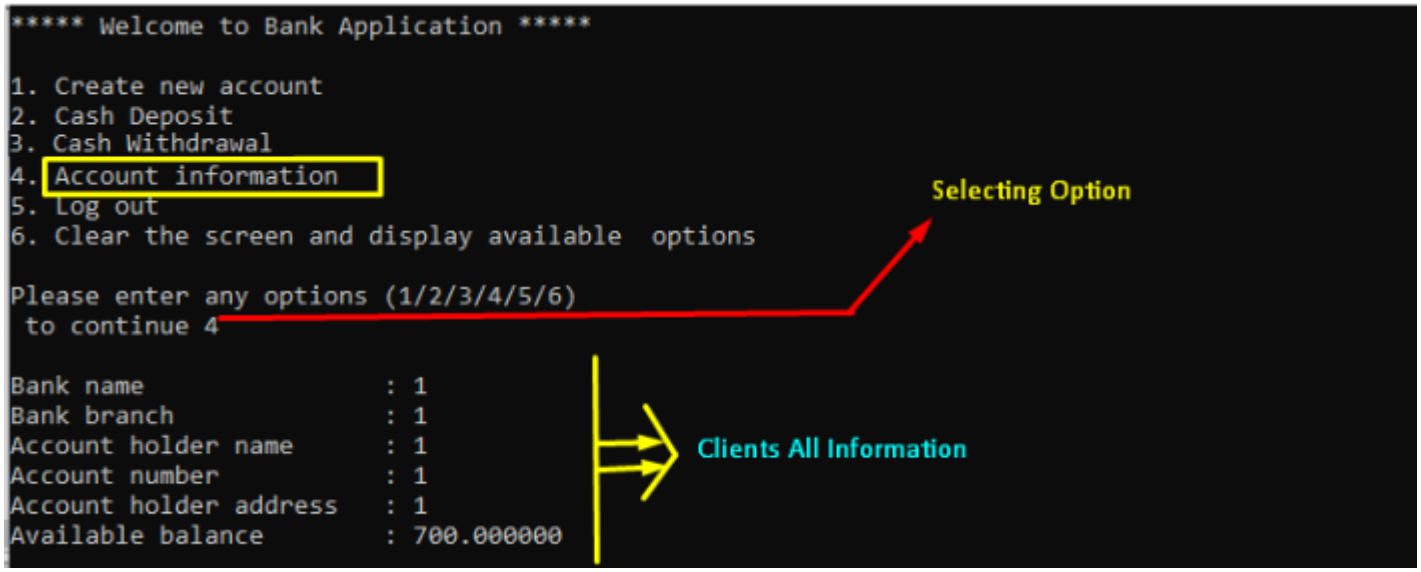
Cash deposit system.



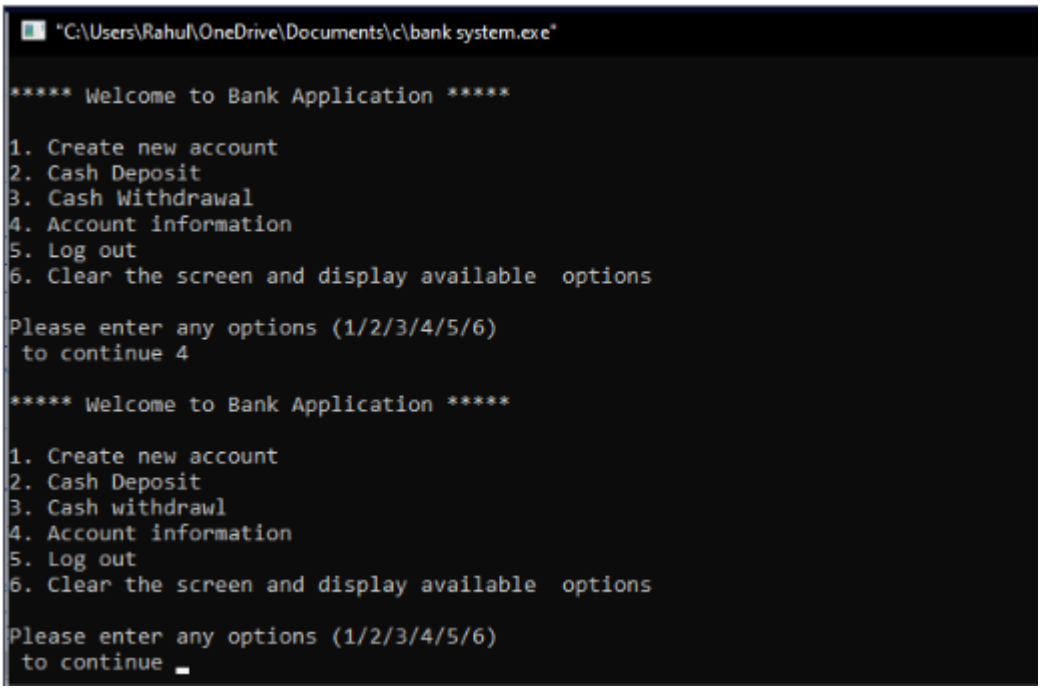
Cash withdraw system part-01



Cash withdraw part-2



Account information.



Screen clear & Display.

Chapter 4

Conclusion

4.1 Introduction

Bank management system is a virtualization of transactions in banking system. The banking system are used manual working but when we used online banking system it is totally virtualization process which avoid manual process and converts it in automatic process . By using this system customer can easily create account, deposit, withdraw money etc. So, it is a very time saver and easy process of banking.

4.1 Scope of Future Work

With this Ai tool a banker can easily manage his/her clients information. In that case, the work will be very easy. In the future this system will reduce banker work. Also the tools has no online hosting database that means if a cyber attacker wants to attack on the system, they see denied access. Because it is totally connected via local host. And the local host secured via Firewall Protection. Moral of the project we can say, in future this tool will decrease manual work and be secured for everyone.

References

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2. Secret Hacker (Blog)
3. w3school.com
4. quora.com
5. studypool.com
6. github.com