Banking System Code

Batch11:

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```
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
#include<ctype.h>
int count=0;

struct node
{
   struct node *prev;
   char fname[60];
   char lname[60];
   char acc_no[10];
   int age;
   char address[60];
   char citizenship[15];
   char phone[10];
   float amt;
   struct node *next;
}*first=NULL,*last=NULL,*temp=NULL,*temp1=NULL;

void create()
{
```

```
   int flag=0;
   int i;
   char acc_no[10];
   char fname[60];
   char lname[60];
   int age;
   char address[60];
   char citizenship[15];
   char phone[10];
   float amt;
   temp=(struct node *)malloc(sizeof(struct node));
   printf("\t\t\t ADD RECORD  ");
   printf("\n\n**IMPORTANT NOTE: while entering names and addresses DO NOT Enter SPACES
between.\n\n");

   line1:
   printf("\nEnter 8 digit account number:");
   scanf("%s",temp->acc_no);
   if(strlen(temp->acc_no)==8)
   {
      for (i = 0; i<8 ; i++)
      {
         if(isalpha(temp->acc_no[i])!=0)
         {
            flag=1;
            break;
         }
         else
            flag=0;
```

```
    }
    if(flag==1)
    {
        printf("Wrong Input... \n Try again\n ");
        goto line1;
    }
    else
        goto line2;
}
else
{
    printf("Wrong Input... \n Try again\n ");
    goto line1;
}

line2:
printf("\nEnter first name:");
scanf("%s",temp->fname);
printf("\nEnter last name:");
scanf("%s",temp->lname);
printf("\nEnter the age:");
scanf("%d",&temp->age);
printf("\nEnter the address:");
scanf("%s",temp->address);

line3:
printf("\nEnter the Aadhar number(12 digits): ");
scanf("%s",temp->citizenship);
if(strlen(temp->citizenship)==12)
```

```
{
   for (i = 0; i<12 ; i++)
   {
      if(isalpha(temp->citizenship[i])!=0)
      {
         flag=1;
         break;
      }
      else
         flag=0;
   }
   if(flag==1)
   {
      printf("Wrong Input... \n Try again\n ");
      goto line3;
   }
   else
      goto line4;
}
else
{
   printf("Wrong Input... \n Try again\n ");
   goto line3;
}

line4:
printf("\nEnter the phone number(10 digits): ");
scanf("%s",temp->phone);
if(strlen(temp->phone)==10)
```

```
{
   for (i = 0; i<10 ; i++)
   {
      if(isalpha(temp->phone[i])!=0)
      {
         flag=1;
         break;
      }
      else
         flag=0;
   }
   if(flag==1)
   {
      printf("Wrong Input... \n Try again\n ");
      goto line4;
   }
   else
      goto line6;
}
else
{
   printf("Wrong Input... \n Try again\n ");
   goto line4;
}

line6:
printf("\nEnter the amount to deposit:Rs.");
scanf("%f",&temp->amt);
temp->prev=NULL;
```

```
    temp->next=NULL;
    count++;
}

void insertatfirst()
{
    create();
    if(first==NULL)
    {
        first=temp;
        last=first;
    }
    else
    {
        first->prev=temp;
        temp->next=first;
        first=temp;
    }
}

void display()
{
    if(first==NULL)
    {
        printf("\nNo Accounts\n");
        return;
    }
    else
    {
```

```
    temp=first;
    printf("\nACC. NO.\tNAME\t\tAGE\tAADHAR No.\tADDRESS\t\t\tPHONE\t\tBALANCE\n");
    while(temp!=NULL)
    {
      printf("\n%s\t %8s %s\t%d\t%s\t%8s\t%s\tRs.%f",temp->acc_no,temp->fname,temp->lname,temp->age,temp->citizenship,temp->address,temp->phone,temp->amt);
      temp=temp->next;
      printf("\n");
    }
  }
}

void edit()
{
  printf("\n\n**IMPORTANT NOTE: while entering names and addresses DO NOT Enter SPACES between.\n\n");
  int f=0;
  char nwfname[60];
  char nwlname[60];
  char nwphone[10];
  char nwcitizenship[12];
  char nwaddress[60];
  char ac_no[10];
  int ed,nwage,i,flag=0;
  temp=first;
  printf("\nEnter acc no. to edit details\n");
  scanf("%s",ac_no);
  while(temp!=NULL)
  {
```

```
    if(strcmp(ac_no,temp->acc_no)==0)
    {
       f=1;
       break;
    }
    temp=temp->next;
}
if(f==1)
{
       printf("\t1.To edit name\n");
       printf("\t2.To edit age\n");
       printf("\t3.To edit address\n");
       printf("\t4.To edit phone number\n");
       printf("\t5.To edit Aadhar number\n");
       printf("\tEnter your choice ");
       scanf("%d",&ed);
       switch(ed)
       {
         case 1 : printf("\t\nEnter first name: ");
                  scanf("%s",nwfname);
                  strcpy(temp->fname,nwfname);
                  printf("\t\nEnter last name: ");
                  scanf("%s",nwlname);
                  strcpy(temp->lname,nwlname);
                  printf("\n Changes Saved.\n");
                  return;
              break;
         case 2 : printf("\t\nEnter new age: ");
                  scanf("%d",&nwage);
```

```
        temp->age=nwage;
        printf("\n Changes Saved.\n");
        return;
    break;
case 3 : printf("\t\nEnter new address: ");
        scanf("%s",nwaddress);
        strcpy(temp->address,nwaddress);
        printf("\n Changes Saved.\n");
        return;
    break;
case 4 : LINE1:
        printf("\t\nEnter new phone number(10 digits): ");
        scanf("%s",nwphone);
        if(strlen(nwphone)==10)
        {
          for (i = 0; i<10 ; i++)
          {
            if(isalpha(nwphone[i])!=0)
            {
              flag=1;
              break;
            }
            else
              flag=0;
          }
          if(flag==1)
          {
            printf("Wrong Input... \n Try again\n ");
            goto LINE1;
```

```
        }
        else
          goto LINE2;
      }
      else
      {
        printf("Wrong Input... \n Try again\n ");
        goto LINE1;
      }
      LINE2:
      strcpy(temp->phone,nwphone);
      printf("\n Changes Saved.\n");
      return;
   break;
case 5: LINE3:
      printf("\t\nEnter new Aadhar number(12 digits): ");
      scanf("%s",nwcitizenship);
      if(strlen(nwcitizenship)==12)
      {
        for (i = 0; i<12 ; i++)
        {
          if(isalpha(nwcitizenship[i])!=0)
          {
            flag=1;
            break;
          }
          else
           flag=0;
        }
```

```
                    if(flag==1)
                    {
                      printf("Wrong Input... \n Try again\n ");
                      goto LINE3;
                    }
                    else
                     goto LINE4;
                  }
                  else
                  {
                    printf("Wrong Input... \n Try again\n ");
                    goto LINE3;
                  }
                  LINE4:
                  strcpy(temp->citizenship,nwcitizenship);
                  printf("\n Changes Saved.\n");
                  return;
              break;
          default: printf("\n Invail choice... \n try again\n");
        }
   }
   else
     {
       printf("\nAccount number does not exist.\n");
     }
}

void depositamt()
{
```

```
   int f=0;
   float dep=0;
   char ac_no[10];
   temp=first;
   printf("\nEnter acc no. to deposit\n");
   scanf("%s",ac_no);
   while(temp!=NULL)
   {
      if(strcmp(ac_no,temp->acc_no)==0)
      {
         f=1;
         break;
      }
      temp=temp->next;
   }
   if(f==1)
   {
         printf("\n%s\t %10s %s\tRs.%f\n",temp->acc_no,temp->fname,temp->lname,temp->amt);
         printf("\nEnter amt to deposit\n");
         scanf("%f",&dep);
         temp->amt=temp->amt+dep;
         printf("\n%s\t %10s %s\tRs.%f\n",temp->acc_no,temp->fname,temp->lname,temp->amt);
   }
   else
      printf("\nAccount number does not exist.\n");
}

void withdrawamt()
{
```

```
int f=0;
float wit=0;
char ac_no[10];
temp=first;
printf("\nEnter acc no. to withdraw\n");
scanf("%s",ac_no);
while(temp!=NULL)
{
   if(strcmp(ac_no,temp->acc_no)==0)
   {
      f=1;
      break;
   }
   temp=temp->next;
}
if(f==1)
{
      printf("\n%s\t %10s %s\tRs.%f\n",temp->acc_no,temp->fname,temp->lname,temp->amt);
      retry:
      printf("\nEnter amt to withdraw\n");
      scanf("%f",&wit);
      if(wit>temp->amt)
      {
         printf("\nInsufficient balance... retry with amount lesser than your balance\n");
         goto retry;
      }
      else
      {
         temp->amt=temp->amt-wit;
```

```
            printf("\n%s\t %10s %s\tRs.%f",temp->acc_no,temp->fname,temp->lname,temp->amt);
        }
    }
    else
        printf("\nAccount number does not exist.\n");
}

void delaccfront()
{
    temp=first;
    if(first==NULL)
    {
        printf("\nNo Accounts to delete\n");
        return;
    }
    if(temp->next==NULL)
    {
        printf("\nAccount deleted is \n");
        printf("\n%s\t%8s %s\t%s\tRs.%f\n",temp->acc_no,temp->fname,temp->lname,temp-
>phone,temp->amt);
        free(temp);
        first=NULL;
    }
    else
    {
        first=temp->next;
        printf("\nAccount deleted is \n");
        printf("\n%s\t%8s %s\t%s\tRs.%f\n",temp->acc_no,temp->fname,temp->lname,temp-
>phone,temp->amt);
```

```
        free(temp);
        first->prev=NULL;
    }
}

void delaccend()
{
    temp=first;
    if(first==NULL)
    {
        printf("\nNO Accounts to delete\n");
        return;

    }
    if(temp->next==NULL)
    {
        printf("\nAccount deleted is \n");
        printf("\n%s\t%8s %s\t%s\tRs.%f\n",temp->acc_no,temp->fname,temp->lname,temp->phone,temp->amt);
        free(temp);
        first=NULL;

    }
    else
    {
        temp1=last->prev;
        printf("\nAccount deleted is \n");
        printf("\n%s\t%8s %s\t%s\tRs.%f\n",last->acc_no,last->fname,last->lname,last->phone,last->amt);
        free(last);
```

```
        last=temp1;
        last->next=NULL;

    }
}


void delacc()
{
    int f=0;
    temp=first;
    if(first==NULL)
    {
      printf("\n No Accounts to delete\n");
      return;
    }
    if(temp->next==NULL)
    {
      printf("\nAccount deleted is \n");
      printf("\n%s\t%8s %s\t%s\tRs.%f\n",temp->acc_no,temp->fname,temp->lname,temp->phone,temp->amt);
      free(temp);
      first=NULL;
      return;
    }
    char ac_no[10];
    printf("\nEnter Acc no. to delete \n");
    scanf("%s",ac_no);
    while(temp!=NULL)
```

```
  {
    if(strcmp(ac_no,temp->acc_no)==0)
    {
      f=1;
      if(temp->prev==NULL)
      {
        delaccfront();
        break;
      }
      if(temp->next==NULL)
      {
        delaccend();
        break;
      }
      else
        {
          printf("\nAccount deleted is \n");
          printf("\n%s\t%8s %s\t%s\tRs.%f\n",temp->acc_no,temp->fname,temp->lname,temp->phone,temp->amt);
          temp->prev->next=temp->next;
          temp->next->prev=temp->prev;
          free(temp);
          break;
        }
    }
    else
      temp=temp->next;
  }
  if(f==1)
```

```
    printf("\nSuccessfully deleted...\n");
  else
    printf("\nAccount does not exist.\n");
}

void main()
{
  int ch,i,n;
  int choice;

  printf("\n\n\t\t\tCUSTOMER BANKING ACCOUNTS MANAGEMENT SYSTEM");
  printf("\n\n\n\t\t\t WELCOME TO THE MAIN MENU ");
  while(1)
  {
    printf("\n\n\t\t1.Create N number of new accounts\n\t\t2.Add another account\n\t\t3.View
accounts list\n\t\t4.To Edit account details\n\t\t5.Deposit amount\n\t\t6.Withdraw
amount\n\t\t7.Delete account\n\t\t8.Exit\n\n\n\n\n\t\t Enter your choice:");
    scanf("%d",&ch);
    switch(ch)
    {
      case 1 : printf("\nEnter the value of n : ");
      scanf("%d",&n);
      for(i=0;i<n;i++)
      {
        insertatfirst();
      }
      break;
      case 2 : insertatfirst();
      break;
```

```
            case 3 : display();
            break;
            case 4 : edit();
            break;
            case 5 : depositamt();
            break;
            case 6 : withdrawamt();
            break;
            case 7 : delacc();
            break;
            case 8 : exit(1);
            break;
            default: printf("\n Incorrect input...\n");
        }
    }
}
```