

Project of the banking management system

Information required for personal banking:

- a. Types of Account: Current Account/Saving Account
- b. Administrative Rights/ Customer Rights

c. **Current Account:** It will be useful for business purposes.

- 1. Add all required details of the Customer.
- 2. The Minimum Money required to open an account is Rs 5000.
- 3. Balance can go to -Rs 50,000.
- 4. Surcharge on Negative Balance @ Rate of Interest 6% per annum
- 5. The rate of interest (Compound Interest) on a Positive Balance will be 4% per annum.

d. **Saving Account:** It will be used for Saving purposes:

- 1. Add all required details of the Customer.
- 2. The Minimum Money required to open an account is Rs 100.
- 3. The Minimum Balance will be Rs 50 and below that fine of 10% per month.
- 4. Rate of Interest (Compound Interest) on Balance will be 5% per annum
- 5. Conclude Monthly Balance sheet.
- e. If a Debit Card is issued then charge Rs 10 per Quarter.
- f. If text message service opted then charge Rs 5 per Quarter.
- g. Net Banking will be free.

1) For current account

```
#include<stdio.h>
```

```
#include<math.h>
```

```
int balance = 0;
```

```
void
```

```
openAccount ()
{

int initial_deposit;

printf ("Enter initial deposit (minimum Rs 5000): ");

scanf ("%d", &initial_deposit);

if (initial_deposit < 5000)
{

printf ("Initial deposit is less than minimum required amount.\n");

return;

}

balance = initial_deposit;

printf ("Account opened successfully. Your current balance is Rs %d.\n",
        balance);

}
```

```
void
```

```
deposit ()
```

```
{
```

```
int amount;
```

```
printf ("Enter amount to deposit: ");
```

```
scanf ("%d", &amount);
```

```
balance += amount;
```

```
printf ("Deposit successful. Your new balance is Rs %d.\n", balance);
```

```
}
```

```
void
```

```
withdraw ()
```

```
{
```

```
int amount;
```

```
printf ("Enter amount to withdraw: ");
```

```
scanf ("%d", &amount);
```

```
if (balance - amount >= -50000)
```

```
{
```

```
    balance -= amount;
```

```
    printf ("Withdrawal successful. Your new balance is Rs %d.\n",
```

```
           balance);
```

```
}
```

```
else
```

```
{
```

```
    printf ("Withdrawal amount exceeds overdraft limit.\n");
```

```
}
```

```
}
```

```
void
applyInterest ()
{

if (balance > 0)
    {

balance *= pow ((1 + 0.04 / 12), 12);

printf ("Interest applied. Your new balance is Rs %d.\n", balance);

    }
else
    {

balance *= pow ((1 + 0.06 / 12), 12);

printf ("Surcharge applied. Your new balance is Rs %d.\n", balance);

    }

}
```

```
void
```

```
checkBalance ()
```

```
{
```

```
printf ("Your current balance is Rs %d.\n", balance);
```

```
}
```

```
int
```

```
main ()
```

```
{
```

```
int choice;
```

```
while (1)
```

```
{
```

```
printf
```

```
        ("\\n1. Open Account\\n2. Deposit\\n3. Withdraw\\n4. Apply Interest/Surcharge\\n5. Check  
Balance\\n6. Exit\\n");
```

```
printf ("Enter your choice: ");
```

```
scanf ("%d", &choice);
```

```
switch (choice)
```

```
{
```

```
case 1:
```

```
openAccount ();
```

```
break;
```

```
case 2:
```

```
deposit ();
```

```
break;
```

```
case 3:
```

```
withdraw ();
```

```
break;
```

```
case 4:
```

```
applyInterest ();
```

```
break;
```

```
case 5:
```

```
checkBalance ();
```

```
break;
```

```
case 6:
```

```
return 0;
```

```
default:
```

```
printf ("Invalid choice.\n");
```



```
}
```

```
}
```

```
return 0;
```

```
}
```

Output

1. Open Account
2. Deposit
3. Withdraw
4. Apply Interest/Surcharge
5. Check Balance
6. Exit

Enter your choice: 1

Enter initial deposit (minimum Rs 5000): 60000

Account opened successfully. Your current balance is Rs 60000.

1. Open Account

2. Deposit

3. Withdraw

4. Apply Interest/Surcharge

5. Check Balance

6. Exit

Enter your choice: 2

Enter amount to deposit: 5000

Deposit successful. Your new balance is Rs 65000.

1. Open Account

2. Deposit

3. Withdraw

4. Apply Interest/Surcharge

5. Check Balance

6. Exit

Enter your choice: 3

Enter amount to withdraw: 40000

Withdrawal successful. Your new balance is Rs 25000.

1. Open Account

2. Deposit

3. Withdraw

4. Apply Interest/Surcharge

5. Check Balance

6. Exit

Enter your choice: 4

Interest applied. Your new balance is Rs 26018.

1. Open Account
2. Deposit
3. Withdraw
4. Apply Interest/Surcharge
5. Check Balance
6. Exit

Enter your choice: 5

Your current balance is Rs 26018.

1. Open Account
2. Deposit
3. Withdraw
4. Apply Interest/Surcharge
5. Check Balance
6. Exit

Enter your choice: 6

...Program finished with exit code 0

Press ENTER to exit console.

2) For saving account

```
#include<stdio.h>
```

```
int balance = 0;
```

```
void
```

```
deposit (int amount)
```

```
{
```

```
    balance += amount;
```

```
    printf ("Deposit successful. Your new balance is %d.\n", balance);
```

```
}
```

```
void
```

```
withdraw (int amount)
```

```
{
```

```
    if (amount > balance)
```

```
    {
```

```
        printf ("Insufficient balance.\n");
```

```
    }
```

```
else
```

```
{
```

```
    balance -= amount;
```

```
    printf ("Withdrawal successful. Your new balance is %d.\n", balance);
```

```

    }
}

void
checkBalance ()
{
    printf ("Your current balance is %d.\n", balance);
}

int
main ()
{
    int choice, amount;

    while (1)
    {
        printf
            ("\n1. Deposit\n2. Withdraw\n3. Check Balance\n4. Exit\nEnter your choice: ");
        scanf ("%d", &choice);

        switch (choice)
        {
            case 1:
                printf ("Enter amount to deposit: ");

```

```
        scanf ("%d", &amount);

        deposit (amount);

        break;
case 2:

    printf ("Enter amount to withdraw: ");

    scanf ("%d", &amount);

    withdraw (amount);

    break;
case 3:

    checkBalance ();

    break;
case 4:

    return 0;

default:

    printf ("Invalid choice.\n");

    }

}

return 0;

}
```

Output

1. Deposit

2. Withdraw

3. Check Balance

4. Exit

Enter your choice: 1

Enter amount to deposit: 80000

Deposit successful. Your new balance is 80000.

1. Deposit

2. Withdraw

3. Check Balance

4. Exit

Enter your choice: 2

Enter amount to withdraw: 10000

Withdrawal successful. Your new balance is 70000.

1. Deposit

2. Withdraw

3. Check Balance

4. Exit

Enter your choice: 3

Your current balance is 70000.

1. Deposit

2. Withdraw

3. Check Balance

4. Exit

Enter your choice: 4

...Program finished with exit code 0

Press ENTER to exit console.