**1.ALGORITHM**:

//Banking Software

//The program uses the concept of Array of structures

1. Declare a structure account globally with account number as int, name as string,

account type as char, balance as float.

2. Declare an array of type structure account and initialse it.

3. Initialse and declare the fuctions for Deposit\_amount,

Withdraw\_amount,Balance\_Inquiry.

4. In main function

a. Ask for the user account number if it is present in the array declared then

show the information of the account holder.

b. Then show the options that can be done by the user.

c. By the help of switch statement and the choice selected by then user carry on

with the operations.

5. Loop through the options with the use of goto or while statements for the repetition

of the operational part of the program.

**2.CODE WITH COMMENTS:**

#include<stdio.h>

#define N 5

struct account{

long int accno;

char name[20];

char type;

float bal;

}custmer[5]={{101,"Siri",'S',10000},

{102,"Mytri",'S',12000},

{103,"gayatri",'S',14000},

{104,"Shri",'C',9000},

{105,"Soujanya",'C',2000}

}; //structure defined for account information

int accin; //index

float amount; //variable to hold ammount

void deposit()

{

printf("Enter the amount = ");

scanf("%f",&amount);

printf("\n");

custmer[accin].bal=custmer[accin].bal+amount;

balance();

} //function for deposit money

void withdraw()

{

printf("Enter the amount = ");

scanf("%f",&amount);

printf("\n");

if(amount>custmer[accin].bal)

{

printf("Amount excceds balance\n");

return;

}

custmer[accin].bal=custmer[accin].bal-amount;

balance();

} //function for withdraw money

void balance()

{

printf("Balance = %f\n",custmer[accin].bal);

}

// function to show balance

int main()

{

int accnum,i,ch,f=0;

start :

printf("Enter the Account number= ");

scanf("%d",&accnum);

for(i=0;i<N;i++)//check for existance of the account

{

if(accnum==custmer[i].accno)

{

accin=i;

f=1;

break;

}

}

if(f==0)

{

printf("\nInvalid Account number \n");

goto start;

}

printf("Account number= %d\nName : %s\nAccount type= %c\nBalance =

%f\n",custmer[accin].accno,custmer[accin].name,custmer[accin].type,custmer[accin].bal);

while(1)

{

printf("\nEnter your choice\n1 : Balance Inquiry\n2 : Deposit Amount \n3 : Withdraw

Amount\n4 : Exit\n");

scanf("%d",&ch);

switch(ch) //switch case for options selected wrt choice

{

case 1:balance();break;

case 2:deposit();break;

case 3:withdraw();break;

case 4:exit(0);

default:printf("Enter the correct choice");break;

}

}

}

**3.SAMPLE INPUT OUTPUT:**

Enter the Account number= 101

Account number= 101

Name : Siri

Account type= S

Balance = 10000.000000

Enter your choice

1 : Balance Inquiry

2 : Deposit Amount

3 : Withdraw Amount

4 : Exit

1

Balance = 10000.000000

Enter your choice

1 : Balance Inquiry

2 : Deposit Amount

3 : Withdraw Amount

4 : Exit

2

Enter the amount = 20000

Balance = 30000.000000

Enter your choice

1 : Balance Inquiry

2 : Deposit Amount

3 : Withdraw Amount

4 : Exit

3

Enter the amount = 15000

Balance = 15000.000000

Enter your choice

1 : Balance Inquiry

2 : Deposit Amount

3 : Withdraw Amount

4 : Exit

4

Process returned 0 (0x0) execution time : 31.504 s