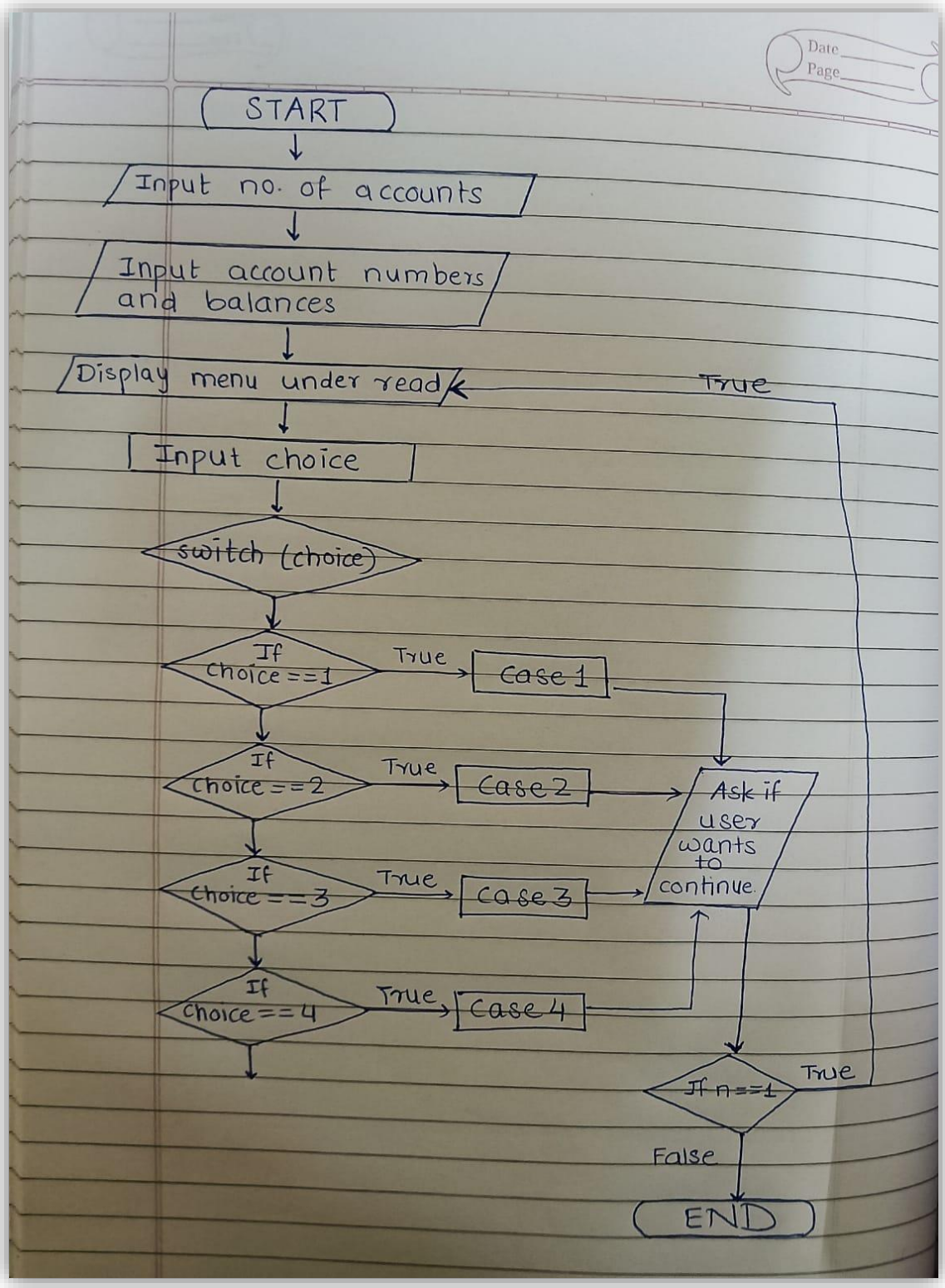
ASSIGNMENT 8

Write a menu-driven C program to display, withdraw, deposit and check balance in bank application.

Algorithm:

1. Start the program with taking input of two numbers from the user representing the account number and balance.
2. Then print the menu of the program.
3. Using switch case perform each function of the menu.
4. Case 1 for display account number and balance.
5. Case 2 for withdrawing money (accepting value from user) from the account.
6. Case 3 for depositing money (accepting value from user) from the account.
7. Case 4 for checking the balance.
8. Use user defined functions in each menu.
9. Goto statement is used at the end of every case to jump to the menu repeatedly.

Flowchart:


START
Input no. of accounts
Input account numbers and balances
Display menu under read
Input choice
switch (choice)
If choice == 1
True
case 1
If choice == 2
True
case 2
If choice == 3
True
case 3
If choice == 4
True
case 4
Ask if user wants to continue
If n == 1
True
False
END

Code:

```
#include <stdio.h>
int main()
{
   int n, a, b, c, x, y, w_draw, dep, choice, bal;
   printf("Enter number of account holders: ");
   scanf("%d", &n);

   int num[n][2];
   for(a=0; a<n; a++)
   {
      printf("Enter an account number: ");
      scanf("%d", &num[a][0]);
      printf("Enter its balance: ");
      scanf("%d", &num[a][1]);}

read:
printf("Menu:\n");
printf("1. Display all account numbers with balance\n");
printf("2. Withdraw amount from a bank amount\n");
printf("3. Deposit amount in a bank account\n");
printf("4. Check bank balance for an account\n");
printf("Enter your choice: ");
scanf("%d", &choice);
```

```
switch(choice)
{
   case 1:
   printf("The registered accounts are:\n");
   for(a=0; a<n; a++)
   {
      printf("The account number and balance for account:
%d\t%d\n",num[a][0], num[a][1]);
   }
   printf("\nDo you wish to continue ?\nEnter 1 for Yes\nEnter 0 for No\n");
   scanf("%d", &y);

   if(y==1)
   {
      goto read;
   }
   break;

   case 2:
   printf("Enter the account number: ");
   scanf("%d", &c);
   for(a=0; a<n; a++)
   {
      if(num[a][0]==c)
      {
         printf("Enter amount to be withdrawn: ");
```

```
        scanf("%d", &w_draw);
        if(w_draw<=num[a][1])
        {
           num[a][1]=num[a][1]-w_draw;
           printf("Withdrawl successfull\n Remaining balance: %d",num[a][1]);
           break;
        }
        else
        {
           printf("Insufficeient balance.");
           break;
        }
     }
}
if(num[a][0]!=c)
{
   printf("This account does not exist");
   break;
}
printf("\nDo you wish to continue ?\nEnter 1 for Yes\nEnter 0 for No\n");
scanf("%d", &y);
if(y==1)
{
   goto read;
}
break;
```

```
case 3:
printf("Enter the account number");
scanf("%d", &x);
for(a=0; a<n; a++)
{
   if(num[a][0]==x)
   {
      printf("Enter amount to be deposited: ");
      scanf("%d", &dep);
      num[a][1]=num[a][1]+dep;
      printf("Deposited successfully\nCurrent balance: %d", num[a][1]);
      if(num[a][0]!=x)
      {
         printf("This account does not exist.");
         break;
      }
   }
}
printf("\nDo you wish to continue ?\nEnter 1 for Yes\nEnter 0 for No\n");
scanf("%d", &y);
if(y==1)
{
   goto read;
}
break;
```

```
   case 4:
   printf("Enter the account number: ");
   scanf("%d", &bal);
   for(a=0; a<n; a++)
   {
      if(num[a][0]==bal)
      {
         printf("The current balance is %d: ", num[a][1]);
         if(num[a][0]!=bal)
         {
            printf("This account does not exist.");
            break;
         }
         printf("\nDo you wish to continue ?\nEnter 1 for Yes\nEnter 0 for
No\n");
         scanf("%d", &y);
         if(y==1)
         {
            goto read;
         }
         break;
      }
   }
}


return 0;
```

}

Output:

Enter number of account holders: 3

Enter an account number: 524

Enter its balance: 25468745

Enter an account number: 422

Enter its balance: 68746546

Enter an account number: 356

Enter its balance: 35433687

Menu:

1. Display all account numbers with balance

2. Withdraw amount from a bank amount

3. Deposit amount in a bank account

4. Check bank balance for an account

Enter your choice: 1

The registered accounts are:

The account number and balance for account: 524 25468745

The account number and balance for account: 422 68746546

The account number and balance for account: 356 35433687

Do you wish to continue?

Enter 1 for Yes

Enter 0 for No

1

Menu:

1. Display all account numbers with balance

2. Withdraw amount from a bank amount

3. Deposit amount in a bank account

4. Check bank balance for an account

Enter your choice: 2

Enter the account number: 422

Enter amount to be withdrawn: 658965

Withdrawl successful

Remaining balance: 68087581

Do you wish to continue?

Enter 1 for Yes

Enter 0 for No

1

Menu:

1. Display all account numbers with balance

2. Withdraw amount from a bank amount

3. Deposit amount in a bank account

4. Check bank balance for an account

Enter your choice: 3

Enter the account number524

Enter amount to be deposited: 54782

Deposited successfully

Current balance: 25523527

Do you wish to continue?

Enter 1 for Yes

Enter 0 for No

1

Menu:

1. Display all account numbers with balance

2. Withdraw amount from a bank amount

3. Deposit amount in a bank account

4. Check bank balance for an account

Enter your choice: 4

Enter the account number: 524

The current balance is 25523527:

Do you wish to continue?

Enter 1 for Yes

Enter 0 for No

0