



Sample: C - ATM Machine C Program

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

void AccountMenu( char *typeAccat);
void ShowBalance( double currBal);
void DepositMoney( double *currBal);
void WithdrawMoney( double *currBal);
void Repeat(char *doAgain);

void mainMenu(int *choice) {
    printf("Please choose from the following menu:\nDEPOSIT ..... 1\nWITHDRAWAL
    ..... 2\nACCOUNT BALANCE... 3\nTo transfer money, first select (2) for
    WITHDRAWAL\nThen (1) for DEPOSIT\n\nYour selection: ");
    scanf("%d", choice);
}

/*Displays the types of account they would like to access and sets the
value of the chosen account type*/
void AccountMenu( char *typeAccat) {
    printf("Type of account\nChoose C for Checking\nChoose S for Savings\nChoose R for
    Credit\n");
    scanf("%s",typeAccat);
    printf("\n");
}

//Prompts the user for the amount of their deposit and updates the selected account
void DepositMoney( double *currBal) {
    double depotsit;

    printf("Please enter amount you would like to deposit\n");
    scanf("%lg", &depotsit);
    *currBal += depotsit;
    printf("Don't forget your receipt!\n");
}

//Displays the user's current account balance for the selected account
void ShowBalance( double currBal) {
    printf("You have %.2f in your account\n",currBal );
}

//Prompts the user for the amount of the withdrawal, determines if there are
//sufficient funds and updates the selected account if funds are dispensed
void WithdrawMoney( double *currBal) {
    double requestedFunds;

    printf("Please enter the amount of your withdrawal: \n");
    scanf("%lg", &requestedFunds);

    if( requestedFunds > *currBal ) {
        printf("Warning! Insufficient funds!\n");
        return;
    }
    *currBal -= requestedFunds;
    printf("Please take your cash and receipt\n");
}

//Asks the user if he wants another transaction
```



```
void Repeat(char *doAgain) {
    printf("Do you wish to make another selection? (y or n): \n");
    scanf("%s", doAgain);
}

int main() {
    double checking = 575.0;
    double savings = 3750.0;
    double credit = -450.0;
    char typeAccat, doAgain;
    int choice;
    double currBal;

    printf("Welcome to MyBank\n");
    do {
        mainMenu(&choice);
        switch (choice) {
            case 1:
                AccountMenu(&typeAccat);
                switch (typeAccat) {
                    case 'C':
                        DepositMoney(&checking);
                        break;
                    case 'S':
                        DepositMoney(&savings);
                        break;
                    case 'R':
                        DepositMoney(&credit);
                        break;
                    default:
                        printf("Please select an account type correctly\n\n");
                        break;
                }
                break;
            case 2:
                AccountMenu(&typeAccat);
                switch (typeAccat) {
                    case 'C':
                        WithdrawMoney(&checking);
                        break;
                    case 'S':
                        WithdrawMoney(&savings);
                        break;
                    case 'R':
                        WithdrawMoney(&credit);
                        break;
                    default:
                        printf("Please select an account type correctly\n\n");
                        break;
                }
                break;
            case 3:
                AccountMenu(&typeAccat);
                switch (typeAccat) {
                    case 'C':
                        ShowBalance(checking);
                        break;
                    case 'S':
```



```
        ShowBalance(savings);
        break;
    case 'R':
        ShowBalance(credit);
        break;
    default:
        printf("Please select an account type correctly\n\n");
        break;
    }
    break;
default:
    printf("Please select an account type correctly\n");
    break;
}
    printf("\n");
    Repeat(&doAgain);
} while (doAgain != 'N' && doAgain != 'n');

system("pause");
return 0;
}
```