

```

#define _CRT_SECURE_NO_WARNINGS #include <stdio.h> #include <stdlib.h> #include
<string.h> #include <ctype.h>

#define MAX_HISTORY 10

typedef struct { char type[10];

    int amount;

    int balance;

} Transaction;

Transaction history[MAX_HISTORY]; int historyCount = 0;

int isValidCardNumber(char* cardNumber) { int i = 0;

while (cardNumber[i] != '\0') {

    if (!(isdigit(cardNumber[i]) || cardNumber[i] == '-')) {
        return 0;
    }
    i++;
}

if (i != 19) {
    return 0;
}

for (int j = 4; j < 19; j += 5) {
    if (cardNumber[j] != '-') {
        return 0;
    }
}

return 1;

}

```

```

void Withdraw(int* MoneyBalance) { int amount; printf("Please declare the amount you
want to withdraw: "); scanf("%d", &amount);

if (*MoneyBalance == 0) {
    printf("Cannot withdraw. You got no money on your account.\n");
}
else if (*MoneyBalance < amount) {
    printf("Insufficient funds! You only have %d on your account.\n",
*MoneyBalance);
}
else {
    *MoneyBalance -= amount;
    printf("Withdrawal successful! New balance: %d\n", *MoneyBalance);

    if (historyCount < MAX_HISTORY) {
        strcpy(history[historyCount].type, "Withdraw");
        history[historyCount].amount = amount;
        history[historyCount].balance = *MoneyBalance;
        historyCount++;
    }
}

}

void Deposit(int* MoneyBalance) { int amount; printf("Please input the amount you want to
add: "); scanf("%d", &amount);

*MoneyBalance += amount;
printf("Deposit successful! New balance: %d\n", *MoneyBalance);

if (historyCount < MAX_HISTORY) {
    strcpy(history[historyCount].type, "Deposit");
    history[historyCount].amount = amount;
    history[historyCount].balance = *MoneyBalance;
    historyCount++;
}
}

```

```
}
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```
void CheckHistory() { if (historyCount == 0) { printf("No transactions made yet.\n"); } else  
{ printf("\n--- Transaction History ---\n"); for (int i = 0; i < historyCount; i++) { printf("%s:  
$%d, Balance: $%d\n", history[i].type, history[i].amount, history[i].balance); } }
```

```
int main() { int MoneyBalance = 0;
```

```
char choice; char CCI[20];
```

```
printf("Please input your credit card number: ");
```

```
scanf("%18s", CCI);
```

```
while (1) {
```

```
    printf("Please enter your credit card number (format: 1234-5678-  
9012-3456): ");
```

```
    scanf("%19s", CCI);
```

```
    if (isValidCardNumber(CCI)) {
```

```
        printf("Card number %s is valid.\n", CCI);
```

```
        break;
```

```
    }
```

```
    else {
```

```
        printf("Invalid input. Please follow the format 1234-5678-  
9012-3456.\n");
```

```
    }
```

```
}
```

```
while (1) {
```

```
    printf("\nAlright, what do you want to do?\n");
```

```
    printf("A. Withdraw\nB. Deposit\nC. Check account history\nD.
```

```
Exit\n");
```

```
    printf("Enter your choice (A/B/C/D): ");
```

```
while (getchar() != '\n');
```

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

```
switch (choice) {
```

```
case 'A':
```

```
    case 'a':
        Withdraw(&MoneyBalance);
        break;
    case 'B':
    case 'b':
        Deposit(&MoneyBalance);
        break;
    case 'C':
    case 'c':
        CheckHistory();
        break;
    case 'D':
    case 'd':
        printf("Exiting...\n");
        return 0;
    default:
        printf("Invalid choice! Please select A, B, C, or D.\n");
        break;
}

return 0;

}
```