

IQRA NATIONAL UNIVERSITY
PESHAWAR PAKISTAN

NAME: SYED JUNAID ALI SHAH

ID NO: 16373

**DEPARTMENT: BS SOFTWARE
ENGINEERING (SE)**

EXAMINATION: Final Assigment

**The answer is given
below:**

Q1: Using a do-while loop, write a program that will do banking transactions as per the figures below:

```
Welcome to AWESOME BANK
What do you want to do?
+-----+
| 1 - Withdawal |
| 2 - Balance Inquiry |
| 3 - Exit |
+-----+
Please enter your choice: 1
Please enter the amount in PKR: 1500
You have insufficent funds do so.
Thank you!_
```

Figure 1

Based on Figure 1, the program shows the options available at the ATM machine. If the user withdraws amount more than the available balance, an error message

will be displayed and the program is terminated. Assume that the account has PKR 1000.00 starting balance.

```
Welcome to AWESOME BANK
What do you want to do?
+-----+
| 1 - Withdawal |
| 2 - Balance Inquiry |
| 3 - Exit |
+-----+

Please enter your choice: 1
Please enter the amount in PKR 500
Thank you for the transaction. Your balance is 500
Do you want to exit transaction? <Y/N>:
```

Figure 2

Figure 2 show that the user is withdrawing some amount from the account. The program will display the balance left in the account. It will then ask the user whether he or she wants to proceed with another transaction.

```
Welcome to AWESOME BANK
What do you want to do?
+-----+
| 1 - Withdawal |
| 2 - Balance Inquiry |
| 3 - Exit |
+-----+

Please enter your choice: 2
The balance is 500
Do you want to exit transaction? <Y/N>: _
```

Figure 3

Figure 3 show the balance inquiry option, which allows the user to check their balance in the account.

```
Welcome to AWESOME BANK
What do you want to do?
+-----+
| 1 - Withdawal |
| 2 - Balance Inquiry |
| 3 - Exit |
+-----+

Please enter your choice: 3
Are you sure want to exit? <Y/N>: y
Thank you!_
```

Figure 4

Figure 4 show when the user decides to exit the program. Note that to clear screen, you need to use system ("cls"); and include a header file stdlib.h

😊 *****😊

Answer: First of all the Code of Full Question:

```
#include <iostream>

#include <stdlib.h>

using namespace std;

void showOptions()
{
    cout<<"\t\t+-----+"<<endl;
    cout<<"\t\t: 1 - Withdrawal \t\t:"<<endl;
    cout<<"\t\t: 2 - Balance Inquiry \t\t:"<<endl;
    cout<<"\t\t: 3 - Exit \t\t\t:"<<endl;
    cout<<"\t\t+-----+"<<endl<<endl;
    cout<<"Please Enter Your Choice : ";
}

int main()
{
    char yesnostatus;

    int opt;

    int amount = 1000;

    int withdraw_amount;
```

```
char exit;

cout << "Welcome to AWESOME BANK" << endl<<endl;

cout<<"What do you want to do?"<<endl<<endl;

do

{

showOptions();

cin>>opt;

cout<<endl;

switch(opt)

{

case 1:

    cout<<"Please Enter Amount in PKR: ";

    cin>>withdraw_amount;

    if(amount<withdraw_amount)

    {

        cout<<"You have insufficient funds to do transaction \n
Thank You!"<<endl;

    }

    else

    {

amount = amount-withdraw_amount;

cout<<"Transaction Completed... "<<endl<<endl;

    }

}
```

```
break;
```

```
case 2:
```

```
cout<<"The Balance is "<<amount<<endl<<endl;
```

```
break;
```

```
case 3:
```

```
cout<<"Are you sure to Exit (Y/N) : ";
```

```
cin>>exit;
```

```
if(exit == 'Y' || exit == 'y')
```

```
{
```

```
    system("cls");
```

```
}
```

```
break;
```

```
default:
```

```
cout<<"Incorrect options selected"<<endl<<endl;
```

```
}
```

```
cout<<"DO YOU WANT TO EXIT TRANSACTION (Y/N): ";
```

```
cin>>yesnostatus;
```

```
cout<<endl;
```

```
}while(yesnostatus == 'Y' || yesnostatus == 'y');
```

```
}
```

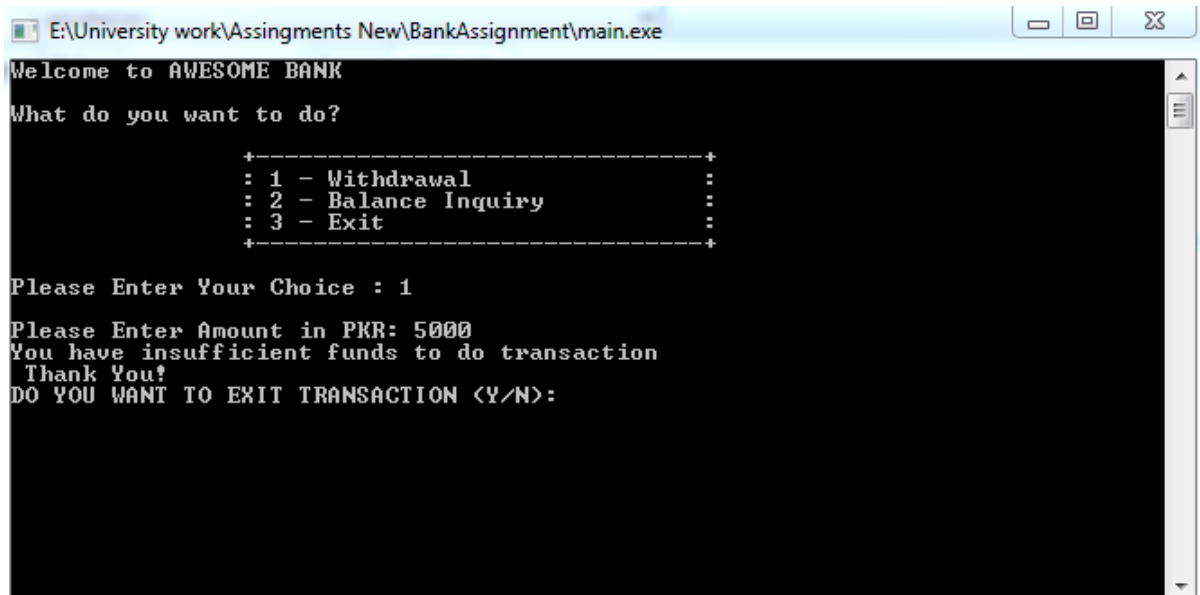
```
EVUniversity work\Assignments New\BankAssignment\main.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
2.cpp main.cpp
1 #include <iostream>
2 #include <stdlib.h>
3 using namespace std;
4
5 void showOptions()
6 {
7     cout<<"\t\t+-----+\t\t<<endl;
8     cout<<"\t\t: 1 - Withdrawal \t\t:<<endl;
9     cout<<"\t\t: 2 - Balance Inquiry \t\t:<<endl;
10    cout<<"\t\t: 3 - Exit \t\t:<<endl;
11    cout<<"\t\t+-----+\t\t<<endl<<endl;
12
13    cout<<"Please Enter Your Choice : ";
14 }
15
16 int main()
17 {
18     char yesnostatus;
19     int opt;
20     int amount = 1000;
21     int withdraw_amount;
22     char exit;
23     cout << "Welcome to AWESOME BANK" << endl<<endl;
24     cout<<"What do you want to do?"<<endl<<endl;
25     do
26     {
27
28         showOptions();
29         cin>>opt;
30         cout<<endl;
31         switch(opt)
32         {
33             case 1:
34                 cout<<"Please Enter Amount in PKR : ";
35                 cin>>withdraw_amount;
36                 if(amount<withdraw_amount)
37                 {
38                     cout<<"You have insufficient funds to do transaction \n Thank You!"<<endl;
39                 }
40             }
41         }
42     }while(yesnostatus == 'Y' || yesnostatus == 'y');
```

Line: 68 Col: 1 Sel: 0 Lines: 70 Length: 1627 Insert Done parsing in 0.172 seconds

```
EVUniversity work\Assignments New\BankAssignment\main.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
2.cpp main.cpp
33     case 1:
34         cout<<"Please Enter Amount in PKR : ";
35         cin>>withdraw_amount;
36         if(amount<withdraw_amount)
37         {
38             cout<<"You have insufficient funds to do transaction \n Thank You!"<<endl;
39         }
40         else
41         {
42             amount = amount-withdraw_amount;
43             cout<<"Transaction Completed... "<<endl<<endl;
44         }
45         break;
46     case 2:
47         cout<<"The Balance is "<<amount<<endl<<endl;
48         break;
49     case 3:
50         cout<<"Are you sure to Exit (Y/N) : ";
51         cin>>exit;
52         if(exit == 'Y' || exit == 'y')
53         {
54             system("cls");
55         }
56         break;
57     default:
58         cout<<"Incorrect options selected"<<endl<<endl;
59     }
60 }
61
62 cout<<"DO YOU WANT TO EXIT TRANSACTION (Y/N): ";
63 cin>>yesnostatus;
64 cout<<endl;
65 }while(yesnostatus == 'Y' || yesnostatus == 'y');
```

Line: 68 Col: 1 Sel: 0 Lines: 70 Length: 1627 Insert Done parsing in 0.172 seconds

1. This is first step. If transaction is more than 1000 it show you have insufficient found to do transaction thank you.



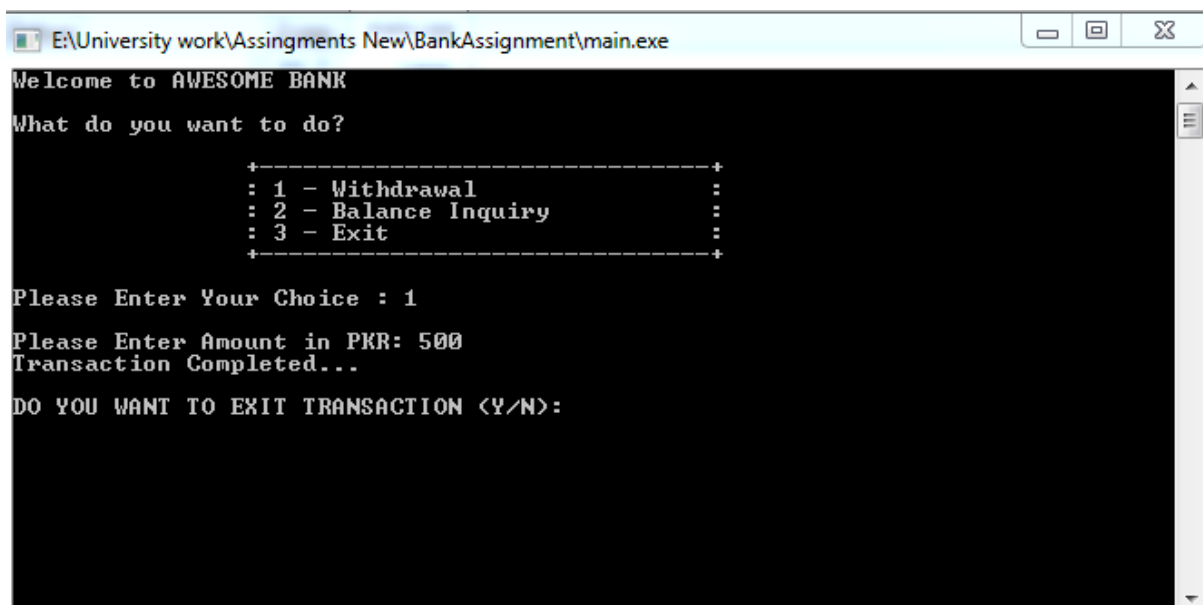
```
E:\University work\Assingments New\BankAssignment\main.exe
Welcome to AWESOME BANK
What do you want to do?

+-----+
: 1 - Withdrawal      :
: 2 - Balance Inquiry :
: 3 - Exit            :
+-----+

Please Enter Your Choice : 1

Please Enter Amount in PKR: 5000
You have insufficient funds to do transaction
Thank You?
DO YOU WANT TO EXIT TRANSACTION <Y/N>:
```

2. Figure 2 show that the user is withdrawing some amount from the account. The program will display the balance left in the account.



```
E:\University work\Assingments New\BankAssignment\main.exe
Welcome to AWESOME BANK
What do you want to do?

+-----+
: 1 - Withdrawal      :
: 2 - Balance Inquiry :
: 3 - Exit            :
+-----+

Please Enter Your Choice : 1

Please Enter Amount in PKR: 500
Transaction Completed...
DO YOU WANT TO EXIT TRANSACTION <Y/N>:
```

OR

```
E:\University work\Assingments New\BankAssignment\main.exe
Welcome to AWESOME BANK
What do you want to do?

+-----+
: 1 - Withdrawal      :
: 2 - Balance Inquiry :
: 3 - Exit            :
+-----+

Please Enter Your Choice : 1
Please Enter Amount in PKR: 300
Transaction Completed...
DO YOU WANT TO EXIT TRANSACTION (Y/N):
```

3. Figure 3 show the balance inquiry option, which allows the user to check their balance in the account.

```
E:\University work\Assingments New\BankAssignment\main.exe
Welcome to AWESOME BANK
What do you want to do?

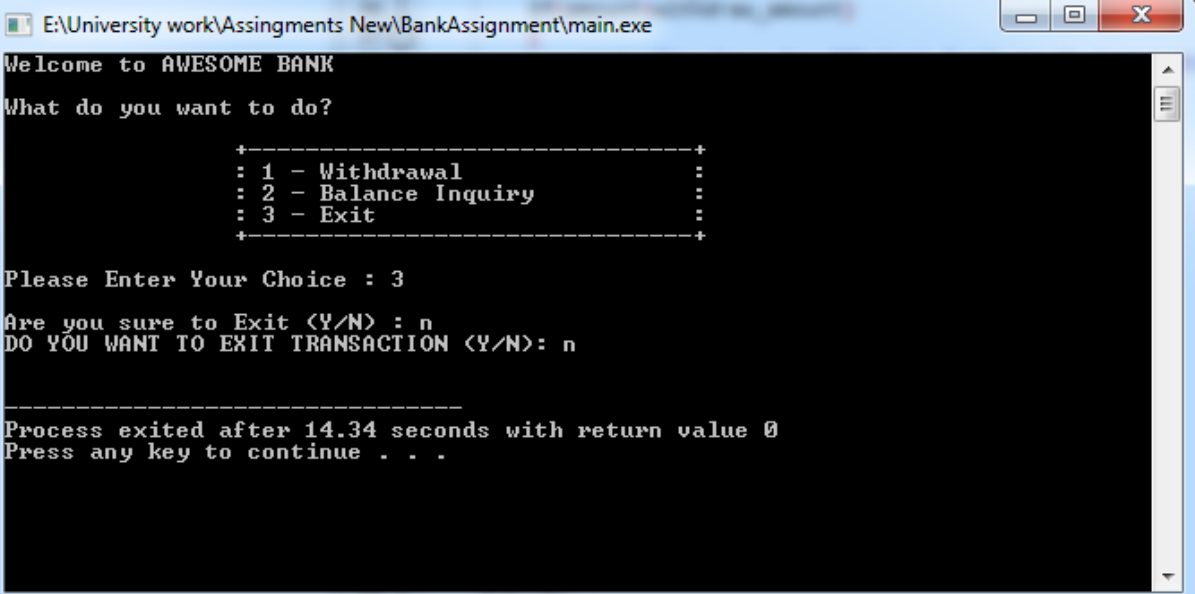
+-----+
: 1 - Withdrawal      :
: 2 - Balance Inquiry :
: 3 - Exit            :
+-----+

Please Enter Your Choice : 1
Please Enter Amount in PKR: 500
Transaction Completed...
DO YOU WANT TO EXIT TRANSACTION (Y/N): y

+-----+
: 1 - Withdrawal      :
: 2 - Balance Inquiry :
: 3 - Exit            :
+-----+

Please Enter Your Choice : 2
The Balance is 500
DO YOU WANT TO EXIT TRANSACTION (Y/N):
```


4. Figure 4 show when the user decides to exit the program.



```
E:\University work\Assingments New\BankAssignment\main.exe
Welcome to AWESOME BANK
What do you want to do?
+-----+
: 1 - Withdrawal      :
: 2 - Balance Inquiry :
: 3 - Exit             :
+-----+
Please Enter Your Choice : 3
Are you sure to Exit <Y/N> : n
DO YOU WANT TO EXIT TRANSACTION <Y/N>: n

-----
Process exited after 14.34 seconds with return value 0
Press any key to continue . . .
```

This is banking transactions Parogram::

Thank You Sir