**Week 3 lab class**

**Exercise 1: create a project named ATM,** goto the project you have created > src >createa package named **week3.exercises**

create a class named Test with main method.

inside **week3.exercises** open a class with named **Account** with the following details

|  |  |
| --- | --- |
| **variable** | **userName, userId, balance, static bankName** |
| constructor | with **three** parameters name username, userId, initialBalance validate it cannot be less then 0//public **Account (String username, int userId,double** initialBalance**)** {} |
| method | * **void showAccountDetails()** * **getBalance () with double return type** * **setCredit** with void type and parameter double **amount** , add credit amount to the balance * **setDedit** with void type and parameter double amount, subtract credit amount from the balance |

create an instance of Account class named **accout1** in the main method and print the following output by calling showAccountDetails() method.

Initial Balance and informantion:

User Name=Iftiya

User Id = 123,

bankName=dutch bangla

balance =500.0

Balance and informantion after deposit an amount of bdt 2000:

User Name=Iftiya

User Id = 123,

bankName=dutch bangla

balance =2500.0

Balance and informantion after withdrawing an amount of bdt 1000:

User Name=Iftiya

User Id = 123,

bankName=dutch bangla

balance =1500.0

**your program need to pass the following validation**

Initial balance cannot be 0 or negative// after giving negative initial balance balance

account1 balance: $0.00

Credit amount cannot be 0 or negative // after giving negative credit amount

account1 balance: $0.00

Debit amount cannot be 0 or negative // after giving negative debit amount

account1 balance: $0.00

withdrawal amount exceeded current balance // after givig debit amount bigger than current balance

**Exercise 2**

inside **week3.exercises** package create class named **DataTypeDemo**

declare variables named **byteDefault**, **byteMin** and **byteMax** and assign **byteMax** and **byteMin** variable with **max** and **min** number respectively.

define a public void method named **displayByteDetails** print the details of byte datatype

you should get the following output upon calling the method in main class

**Byte type details : byteDefault=0, byteMin=-128, byteMax=127**

create an object of **dtd1** from **DataTypeDemo**

**call** displayByteDetails method and see the output as it is shown in the avobe

**Exercise 3**

inside **DataTypeDemo** class Do the same for **short** type, Do the same for **int** type, Do the same for **long** type, for **Boolean** and **character** print the default values.

**Exercise 4:**

inside **week3.exercises** open a class with named **BookShop** with the following details

|  |  |
| --- | --- |
| variable | title, author, id |
| constructor | with a parameter name id |
| method | * **setTitle** with void type and string parameter * **settAuthor** with void type and string parameter * **getTitle** with string return type * **getAuthor** with string return type * **toString** a override method to display details of the book. |

**output:**

**Book ID: 111**

**Book title: advance java**

**Book author: sakawat**