// Name: Topgyal Gurung

// Project 3: Bank Account

// Class: MAC 190-5425

// Created by Topgyal Gurung on October 7, 2016

// Copyright © 2016 Topgyal Gurung. All rights reserved

**import** java.util.Date; //for date

**class** Account{

**private** **int** id=0;

**private** **double** balance=0;

**private** **double** annualInterestRate=0;

**private** Date dateCreated;

//default constructor

**public** Account(){

id=0;

balance=0;

dateCreated=**new** Date(); //updates the date when acc is created

}

//constructor with arguments

**public** Account (**int** id1,**double** balance1){

**int** id=id1;

**double** balance=balance1;

}

//mutator or setter

**public** **void** setId(**int** id1){

id=id1;

}

**public** **void** setBalance(**double** balance1){

balance=balance1;

}

**public** **void** setInterest(**double** rate){

annualInterestRate=rate;

}

//getter or accessor

**public** **int** getId(){

**return** id;

}

**public** **double** getBalance(){

**return** balance;

}

**public** **double** getannualInterestRate(){

**return** annualInterestRate;

}

**public** Date getDateCreated(){

**return** dateCreated;

}

**public** **double** getMonthlyInterestRate(**double** balance,**double** annualInterestRate){

**return** balance\*(annualInterestRate/1200);

}

//methods

**public** **void** withdraw(**double** amount){

balance-=amount;

}

**public** **void** deposit(**double** amount){

balance+=amount;

}

//public class Account {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Account A=**new** Account();

A.setId(1122);

A.setBalance(20000);

A.setInterest(4.5);

A.withdraw(2500);

A.deposit(3000);

System.***out***.println("Your current balance is: $"+A.getBalance());

System.***out***.println("Your account is created on: "+A.getDateCreated());

System.***out***.println("Your monthly interest is: $"+A.getMonthlyInterestRate(20000,4.5));

}

}