

Assignment - 3

1.

```
import java.util.*;
class Account{
int balance;
void Account(int intialBalance){
System.out.println("Enter the balance:");
Scanner s=new Scanner(System.in);
intialBalance=s.Int();
balance = initialBalance;
};
void Account(){
balance = 0.0;
};
void deposit(int amount){
balance += amount;
};
void withdraw(int amount) {
if (amount > balance) {
System.out.println("Insufficient funds. $5 penalty charged.");
balance -= 5.0;
}
else {
balance -= amount;
}
};
void getBalance() {
return balance;
};
void computeInterest(int interestRate) {
double interest = balance * interestRate / 100.0;
balance += interest;
};
}
class main_account
{
public static void main(String[] args) {
```

```

Account account1 = new Account();
Account account2 = new Account();
account1.deposit(50.0);
account1.withdraw(75.0);
System.out.println("Account 1 balance: $" +
account1.getBalance());
account2.deposit(200.0);
account2.withdraw(300.0);
System.out.println("Account 2 balance: $" +
account2.getBalance());
account1.computeInterest(5.0);
System.out.println("Account 1 balance after interest: $" +
account1.getBalance());
}
}

```

2.

```

import java.util.*;
class Triangle
{
int side1,side2,side3;
System.out.println("Enter the sides of triangle:");
Scanner s=new Scanner(System.in);
side1=s.nextInt();
side2=s.nextInt();
side3=s.nextInt();
void boolean_isRight() {
if((side1 * side1 + side2 * side2 == side3 * side3) || (side1 *
side1 + side3 * side3 == side2 * side2) || (side2 * side2 + side3
* side3 == side1 * side1))
{
System.out.println("Right angled triangle");
}
else
{
System.out.println("Not a Right angled triangle");
}
}
}

```

```

};
void boolean_isScalene() {
System.out.println("Enter the sides of triangle:");
Scanner s=new Scanner(System.in);
side1=s.nextInt();
side2=s.nextInt();
side3=s.nextInt();
if((side1 != side2) && (side1 != side3) && (side2 != side3))
{
System.out.println("Scalene triangle");
}
else
{
System.out.println("Not a Scalene triangle");
}
};
void boolean_isIsosceles() {
System.out.println("Enter the sides of triangle:");
Scanner s=new Scanner(System.in);
side1=s.nextInt();
side2=s.nextInt();
side3=s.nextInt();
if((side1 == side2 && side1 != side3) || (side1 == side3 &&
side1 != side2) ||(side2 == side3 && side2 != side1))
{
System.out.println("Isosceles triangle");
}
else
{
System.out.println("Not an Isosceles triangle");
}
};
void boolean_isEquilateral() {
System.out.println("Enter the sides of triangle:");
Scanner s=new Scanner(System.in);
side1=s.nextInt();
side2=s.nextInt();

```

```
side3=s.nextInt();
if((side1 == side2) && (side1 == side3))
{
System.out.println("Equilateral triangle");
}
else
{
System.out.println("Not a Equilateral triangle");
}
};
}
class istriangle
{
public static void main(String args[])
{
Triangle x=new Triangle();
x.boolean_isRight();
x.boolean_isScalene();
x.boolean_isIsosceles();
x.boolean_isEquilateral();
}
}
```