

```
import java.util.Scanner;
public class Quadratic {
```

```
    public static void main(String[] args) {
        double a, b, c;
```

```
        Scanner input = new Scanner(System.in);
```

```
        System.out.println("Enter the value of coefficients: ");
```

```
        System.out.print("a = ");
```

```
        a = input.nextDouble();
```

```
        System.out.print("b = ");
```

```
        b = input.nextDouble();
```

```
        System.out.print("c = ");
```

```
        c = input.nextDouble();
```

```
        double x1, x2;
```

```
        double d = b * b - 4 * a * c;
```

```
        if(d > 0) {
```

```
            System.out.println("Real and Distinct roots.");
```

```
            x1 = (-b + Math.sqrt(d)) / (2 * a);
```

```
            x2 = (-b - Math.sqrt(d)) / (2 * a);
```

```
            System.out.println("Roots are " + x1 + " and " + x2);
```

3

```
        else if(d == 0) {
```

```
            System.out.println("Real and Equal roots.");
```

```
            x1 = -b / (2 * a);
```

```
            x2 = x1;
```

```
            System.out.println("Roots are " + x1 + " and " + x2);
```

3

```
        else
```

```
            System.out.println("There are no real solutions.");
```

3

1BM19CS053

Divyanshu Shonwab

6/10/2020

MIRAJ

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1BM19CS053

Divyanshu Thorwala

~~import~~

import java.util.Scanner;

class Student

{

 private String usn;

 private String name;

 private int credits[];

 private double marks[];

 private int n;

 private double sgpa;

 private totalcredits;

 Void getdata()

{

 int i;

 Scanner input = new Scanner (System.in);

 System.out.println ("Enter the number of subjects : ");

 n = input.nextInt();

 credits = new int[n];

 marks = new double[n];

 System.out.println ("Enter the details of student : ");

 System.out.println ("Enter the USN of student : ");

 usn = input.next();

 input.nextLine();

 System.out.println ("Enter the name of student : ");

 name = input.next();

 System.out.println ("Enter the credits and marks of subject ");

totalcredit = 0
 for (i=0; i<n; i++)
 {

System.out.print("Enter the credit and marks of subject ");

System.out.println(i+1);

credits[i] = input.nextInt();

totalcredits = totalcredits + credits[i];

if (totalcredits > 25)

{

System.out.println("Total credits are more than 25
enter again");

totalcredit = totalcredits - credits[i];

i--;

}

else

marks[i] = input.nextDouble();

}

}

void printdata()

{

System.out.println("The details of student : ");

System.out.print("OSN of student : ");

System.out.print("Name of student : ");

System.out.println(name);

System.out.print("SGPA of student : ");

System.out.println(sgpa);

}

1BM19CS053
Dnyanshu Jha

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MIRAJ

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1BM19CS053

Divyanshu Jhanwar

void calculate()

{

int i;

int x;

double sum=0, total=0;

for(i=0; i<n; i++)

{

if (marks[i] >= 90)

x=10;

else if (marks[i] >= 80)

x=9;

else if (marks[i] >= 70)

x=8;

else if (marks[i] >= 60)

x=7;

else if (marks[i] >= 50)

x=6;

else if (marks[i] >= 40)

x=5;

else

x=0;

sum = sum + credit[i] * x;

total = total + credit[i];

3

sgpa = sum / total;

3

6/10/2020

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1DM19CS053

Dnyaneshwar Thawale

public class LabProg2 {

 public static void main (String [] args) {

 Student s1 = new Student();

 s1.getdata();

 s1.calculate();

 s1.printdata();

}

}

1BM19CS053

Dnyanesh Thorwad

```
import java.util.Scanner;
```

```
class Book {
```

```
    private String name;  
    private String author;  
    private double price;  
    private int numPages;
```

```
Book(String s, String a, double p, int n)  
{
```

```
    name = s;  
    author = a;  
    price = p;  
    numPages = n;
```

3

```
Book()
```

{

```
    name = "NULL";  
    author = "NULL";  
    price = 0;  
    numPages = 0;
```

3

```
void setData()
```

{

```
Scanner input = new Scanner(System.in);
```

```
System.out.println("Enter the name of the book : ");
```

```
name = input.next();
```

```
input.nextLine();
```

1 BM19(S05)

Digvijay Thorawar

System.out.println("Enter the author of the book :");

author = input.next();

input.nextLine();

System.out.println("Enter the price of the book :");

price = input.nextDouble();

System.out.println("Enter the number of pages in the
book :");

numPages = input.nextLine();

numPages = input.nextInt();

3

void getData()

{

System.out.println("The name of the book is : " + name);

System.out.println("The author of the book is : " + author);

System.out.println("The price of the book is : " + price);

System.out.println("Number of pages in the book are : "

+ numPages);

3

3

public String toString()

{

return("name of the book : " + name + " \nauthor of the
book : " + author + " \nprice of the book : " + price +

" \nnumber of pages in the book : " + numPages);

3

3

13/10/2020

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Date:

MIRAJ

1BMS053
Divyanshu Thawani

public class lab3 {

 public static void main (String args []) {

 Scanner xx = new Scanner (System.in);

 System.out.println ("Enter the number of books : ");

 int n = xx.nextInt();

 Book b [] = new Book [n];

 int i;

 System.out.println ("Enter the details of the book : ");

 for (i=0; i < n; i++)

 {

 System.out.println ("Enter the details of the " + (i+1) + " book ");

 b[i] = new Book();

 b[i].Setdata();

 }

 System.out.println ("The details of the " + (i+1) + " book is : ");

 for (i=0; i < n; i++)

 {

 System.out.println ("The details of the " + (i+1) + " book is : ");

 System.out.println ("The details of the books are : ");

 for (i=0; i < n; i++)

 {

 System.out.println ("The details of the " + (i+1) + " book is : ");

 System.out.println (b[i]);

 }

3

3

1 BM19CS053

import java.util.Scanner;

abstract class Shape
{

 private int a, b;
 void setshape(int x, int y)
{

 x = x;
 y = y;
 }

 int geta()
{

 return a;
 }

 int getb()
{

 return b;
 }

 abstract public void printArea();
}

class ~~set~~ rectangle extends shape
{

 private int area = rect;

 private int area = rect;

 rectangle (int x, int y)
{

 setshape(x, y);
 }

}

public void print-area()

$$\text{area-rect} = \text{getA()} * \text{getB}();$$

System.out.println("Area of rectangle is : " + area-rect);

3

class triangle extends shape

2

private double area-tri;

triangle(int x, int y)

{

setshape(x, y);

3

public void print-area()

{

$$\text{area-tri} = (\text{getA()} * \text{getB}()) / 2;$$

System.out.println("The area of triangle is : " + area-tri);

3

class circle extends shape

{

private double area-circle;

circle(int y)

{

~~setshape~~ setshape(0, y);

3

2
public void print-area()

$$\text{area-circle} = ((3.14) * \text{getB()} * \text{getB()});$$

System.out.println ("Area of circle is : " + area-circle);

3

public class week 81

4
public static void main (String args[]) {

Scanner xx = new Scanner (System.in);

int a, b;

System.out.println ("Enter the length of the rectangle : ");

a = xx.nextInt();

System.out.println ("Enter the breadth of rectangle : ");

b = xx.nextInt();

rectangle r = new rectangle (a, b);

r.print-area();

System.out.println ("Enter the height of triangle : ");

b = xx.nextInt();

System.out.println ("Enter the base of the triangle : ");

b = xx.nextInt();

triangle t = new triangle (a, b);

t.print-area();

System.out.println ("Enter the radius of circle : ");

a = xx.nextInt();

circle c = new circle (a);

c.print-area();

3

3

3/11/2020

(2)

```
import java.util.Scanner;  
import java.util.Math;
```

```
class Account
```

```
{
```

```
    private String name;  
    private double account_no;  
    private char account_type;  
private double  
    private double balance;
```

```
    void getdata(char ch)
```

```
{
```

```
    Scanner xx = new Scanner(System.in);
```

```
    System.out.print("Enter the name of the customer : ");
```

```
    name = xx.next();
```

```
    xx.nextLine();
```

```
    System.out.print("Enter the account number of the customer : ");
```

```
    account_no = xx.nextDouble();
```

```
    System.out.print("Enter the balance of the customer : ");
```

```
    balance = xx.nextDouble();
```

```
    account_type = ch;
```

```
3
```

```
    void updatebalance(double x)
```

```
{
```

```
    balance = balance + x;
```

```
3
```

void updatebalance(double x)

{

balance = balance - x;

void updatebalance1 (double x)

{

balance = balance - x;

{

void updatebalance2 (double x)

{

balance = x;

{

double getbalance()

{

return balance;

{

void displaybalance()

{

System.out.println ("The balance is : " + balance);

{

{

class Saving-Account extends Account {

private double interest-rate;

Saving-Account ()

{

Scanner xx = new Scanner (System.in);
getdata ('s');

System.out.print ("Ents the interest rate : ");

interest-rate = xx.nextDouble();

{

void getdeposit()

{

Scanner $\text{xx} = \text{new Scanner}(\text{System.in});$

System.out.print("Enter the amount to be deposited : ");

double $x = \text{xx.nextDouble}();$

updatebalance(x);

3

void computeinterest()

{

Scanner $\text{xx} = \text{new Scanner}(\text{System.in});$

System.out.print("Enter the number of years : ");

double time = $\text{xx.nextDouble}();$

double $x = (\text{getbalance}())^{\ast} \cancel{\text{Math.pow}(C + ((\text{Interest-rate})/100))}$
 $\text{Math.pow}(C(1 + ((\text{interest-rate})/100)), \text{time});$

updatebalance2(x);

System.out.println("The Computed interest is : " + x);

displayBalance();

3

void withdrawl()

{

System.out.print("Enter the amount to be withdrawn : ");

Scanner $\text{xx} = \text{new Scanner}(\text{System.in});$

double $x = \text{xx.nextDouble}();$

while ($x > \text{getbalance}()$)

{

System.out.println("The amount withdrawn is more
than the balance enter again = "),

$x = \text{xx.nextDouble}();$

3

updateBalance();

displayBalance();

3

3

class Current_Account extends Account {

private double min_balance;

private int cheque_book;

Current_Account()

{

Scanner xx = new Scanner(System.in);

getdata('C');

System.out.print("Enter the minimum balance : ");

min_balance = xx.nextDouble();

3

void getdeposit()

{

Scanner xx = new Scanner(System.in);

System.out.print("Enter the amount to be deposited : ");

double x = xx.nextDouble();

updateBalance(x);

3

Void issuecheck()

{

Scanner xx = new Scanner(System.in);

System.out.print("Enter the ~~amount~~^{amount} of the check : ");

double x = xx.nextDouble();

if (x > (getbalance() - min_balance))

{

System.out.println ("You have issued check of more than the minimum balance and you have been charged the penalty of 100 rupees");
 updateBalance(100);

3

else

{

 updateBalance(1(x));

3

 displayBalance();

3 3

 void withdraw()

{

 System.out.print ("Enter the amount to be withdrawn: ");

 Scanner x = new Scanner (System.in);

 double x = x.nextDouble();

 while (x > (getBalance() - minBalance))

{

 System.out.println ("The amount withdrawn is more

 than the balance enter again: ");

 x = x.nextDouble();

3

 updateBalance(1(x));

 displayBalance();

3

3

public class week 82 {

public static void main (String args[]) {

Scanner input = new Scanner (System.in);
char ch;

System.out.println ("Enter the type of account you
want (c/s) : ");
if (ch == 's' || ch == 'S') {

{

Saving-Account s = new Saving-Account ();
int x = 1;
while (x != 0)

{

System.out.println ("Enter 0 for exit : ");

System.out.println ("Enter 1 for deposit : ");

System.out.println ("Enter 2 for balance enquiry : ");

System.out.println ("Enter 3 to calculate interest : ");

System.out.println ("Enter 4 for withdrawl : ");

x = input.nextInt ();

if (x == 0)

break;

else if (x == 1)

{

s.getdeposit();

}

else if (x == 2)

{

~~s.~~ s.displaybalance();

{

else if ($x == 3$)

{

s.computeInterest();

}

else if ($x == 4$)

{

s.withdraw();

}

}

else

{

Current_Account s = new Current_Account();

int x = 1;

while ($x != 0$)

{

System.out.println ("Enter 0 for exit : ");

System.out.println ("Enter 1 for deposit : ");

System.out.println ("Enter 2 for balance enquiry : ");

System.out.println ("Enter 3 to apply for cheque : ");

System.out.println ("Enter 4 for withdrawal : ");

x = input.nextInt();

if ($x == 0$)

break;

else if ($x == 1$)

s.getDeposit();

else if ($x == 2$)

s.displayBalance();

else if ($x == 3$)

{

s. issuecheck();

}

else if ($x == 4$)

s-withdrawl();

}

}

}