

12/12/23

classmate
Date _____
Page _____

lab program 1

```
import java.util.Scanner;  
class Quadratic  
{  
    int a, b, c;  
    double x1, x2, d;  
    void getd()  
{  
        System.out.println("Aurika V, 1BM22 CS226");  
        Scanner s = new Scanner(System.in);  
        System.out.println("Enter coefficients of a,b,c");  
        a = s.nextInt();  
        b = s.nextInt();  
        c = s.nextInt();  
    }
```

```
void compute()  
{
```

```
    while (a == 0)  
{
```

```
        System.out.println("not a quadratic equation");  
        System.out.println("enter a non zero number");  
        Scanner s = new Scanner(System.in);  
        a = s.nextInt();  
    }
```

```
    d = b * b - 4 * a * c;  
    if (d == 0)  
{
```

$x_1 := (-b) / (2 * a)$;

```
    System.out.println("roots are real and equal");  
    System.out.println("Root 1 = Root 2 = " + x1);  
}
```

else if ($a > 0$)

{

$$\delta_1 = ((-b) + (\text{math.sqrt}(a))) / (\text{double})(a + a);$$

$$\delta_2 = ((-b) - (\text{math.sqrt}(a))) / (\text{double})(a + a);$$

System.out.println ("Roots are real and distinct");

System.out.println ("Root 1: " + δ_1 + "Root 2: " + δ_2);

}

else if ($a < 0$)

{

System.out.println ("Roots are imaginary");

$$\delta_1 = (-b) / (a * a);$$

System.out.println ("Root 1 = " + δ_1 + " + i " + δ_2);

System.out.println ("Root 1 = " + δ_1 + " + i " + δ_2);

}

}

class QuadraticMain

{

public static void main (String args [])

{

Quadratic q = new Quadratic ();

q.getd();

q.compute();

}

Output 1

Rishika.V

1BM22CS226

Enter the coefficients of a, b, c

1

-5

2

Roots are real and distinct

root 1: 4.5615628128 root 2: 4.5615528128

Aufgaben:

Burkhardt:
Bensila ✓ 18Maacs226
missed of

Rushila > IBM 2000
Enter the coefficients of a, b, c ($d = -$) : 10
 $(b) \text{ IBM 2000} - (-) = 80$

1. $\text{m} \cdot \text{m}^{-1} \cdot \text{s}^{-1}$ (b) $\text{m}^2 \cdot \text{s}^{-1}$
2. $\text{m} \cdot \text{m}^{-1} \cdot \text{s}^{-1}$ (c) $\text{m}^2 \cdot \text{s}^{-1}$

What are the following words?

1
then are real and equal

Roots are real and equal
 $(a > b)$ given

Root 1 = Root 2 = 1.0

~~1990-1991) 1991-1992 + 1992-1993~~

Output 3
1BM22CS226 (d-)

After the coefficients of a, b, c

$0 + 1x + 2 = 1 - 2x + 3$ Solving for the next part

4

5 - Page 1 of 1

not a quadratic equation

Enter a non zero value for a:

Digitized by srujanika@gmail.com

Part 1: \Rightarrow Part 2

$$00 + 2 = -3, 0 = \text{IGNN}$$

→ [View Details](#)

10. *What is the relationship between the two groups?*

卷之三

卷之三

266-22-000

...and the world will be at peace.

```

1) class Rectangle{  

    public static void main (String args[]){  

        int length, breadth;  

        length = Integer.parseInt (args[0]);  

        breadth = Integer.parseInt (args[1]);  

        int area = length * breadth;  

        System.out.println ("length of rectangle = " + length);  

        System.out.println ("Breadth of rectangle = " + breadth);  

        System.out.println ("Area of rectangle = " + area);  

    }
}

```

Output 1

length of rectangle = 10

Breadth of rectangle = 2

Area of rectangle = 20

Output 2

length of rectangle = 12

Breadth of rectangle = 15

Area of rectangle = 180

2) class factorial{

public static void main (String args[]){

int fac = 1;

System.out.println ("Enter a number");

Scanner sc = new Scanner (System.in);

int n = sc.nextInt();

for (int i = 1; i <= n; i++)

 fac = fac * i;

System.out.println ("The factorial is " + fac);

}

Exhibit

Enter a number

3 (507400)

The factorial : $n!$

3) clean Auto Array {
 static void main (String args[]) {

```
class Automobil  
{  
    public static void main (String args) {  
        int month = args[0];  
        System.out.println("Days in " + month + ":");  
        switch (month) {  
            case "January":  
            case "March":  
            case "May":  
            case "July":  
            case "August":  
            case "October":  
            case "December":  
                System.out.println("31 days");  
                break;  
            case "February":  
                System.out.println("28 or 29 days");  
                break;  
            case "April":  
            case "June":  
            case "September":  
            case "November":  
                System.out.println("30 days");  
                break;  
            default:  
                System.out.println("Unknown month");  
        }  
    }  
}
```

system. out.println ("April has " + month.length()
" days");

Output:

April has 31 days

4) class sum of digits {

public static void main (String args[]){

long number, sum; numbers to new scanner (extern. in).

Scanner DC - new scanner says "Enter a 6 digit number",
display says "Enter ("Enter a 6 digit number")"

number = gc.readlong();

```
for (sum = 0; number != 0; number = number / 10){
```

sum = sum + number • 1•10 ;

System.out.println("sum of digits: " + sum);

Quirinut.

~~Enter a 6 digit numbers~~

12841

Sum of digits : 11