

1> Quadratic :-

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

```
class Quadratic
```

```
{  
    int a, b, c;  
    double r1, r2, d;  
    void getId();
```

```
{  
    Scanner s = new Scanner(System.in);  
    System.out.println("Enter the 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 value for a");  
        Scanner s = new Scanner(System.in);
```

```
        a = s.nextInt();  
        d = b * b - 4 * a * c;
```

```
        if(d == 0)
```

```
{  
            r1 = (-b) / (2 * a);
```

```
            System.out.println("Roots are real & equal");
```

```
            System.out.println("Root 1 = Root 2 = " + r1);
```

```
        }  
        else if(d > 0)
```

```
{  
            r1 = ((-b) + (Math.sqrt(d))) / (double)(2 * a);
```

```
            r2 = ((-b) - (Math.sqrt(d))) / (double)(2 * a);
```

```
            System.out.println("Root 1 = " + r1 + " Root 2 = " + r2);
```

```
        }  
        else if(d < 0)
```

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

```
            r1 = (-b) / (2 * a);
```

```
            r2 = Math.sqrt(-d) / (2 * a);
```

```
            System.out.println("Root 1 = " + r1 + " + i " + r2);
```

```
            System.out.println("Root 1 = " + r1 + " - i " + r2);
```

```
        }  
    }
```

```
class QuadraticMain {
```

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

```
        Quadratic q = new Quadratic();
```

```
        q.getId();
```

```
        q.compute();
```

```
        System.out.println("2023BMS02608");  
    }
```

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1) Hello world

class use

```
{  
public static void main(String[] args)  
{  
    System.out.println("hello world");  
}  
}
```

output :

hello world

2) ParseInt () method

class RectangleArea

```
{  
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 :

```
javac RectangleArea.java  
java RectangleArea 2 3  
length of rectangle = 2  
breadth of rectangle = 3  
area of rectangle = 6
```



1) Hello world

class use

```
{  
    public static void main(String[] args)  
    {  
        System.out.println("hello world");  
    }  
}
```

output :

hello world

2) ParseInt () method

class RectangleArea

```
{  
    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 :

```
javac RectangleArea.java  
java RectangleArea 2 3  
length of rectangle = 2  
breadth of rectangle = 3  
area of rectangle = 6
```

## 1) Scanner :-

```
import java.util.Scanner;

class HelloWorld {

    public static void main(String args[])
    {
        int a; float b;
        Scanner in = new Scanner(System.in);
        System.out.println("Enter a String");
        s = in.nextInt();
        s = in.nextLine();
        System.out.println("you entered string" + s);
        System.out.println("Enter an integer");
        a = in.nextInt();
        System.out.println("you entered integer " + a);
        System.out.println("Enter a float");
        b = in.nextFloat();
        System.out.println("you entered float " + b);
    }
}
```