

```

① import java.util.Scanner;
class quadratic {

    public static void main (String args []) {
        Scanner sc = new Scanner(System.in);
        double p;
        double q;
        double d;
        double r;
        double r1;
        double r2;
        System.out.printf("Enter of coefficient which is a:");
        int a = sc.nextInt();
        System.out.println("Enter the coefficient which is b:");
        int b = sc.nextInt();
        System.out.println("Enter the coefficient which is c:");
        int c = sc.nextInt();
        System.out.println("Therefore equation is "+a+"x2 "+b+"x "+c);
        if (a == 0)
        {
            System.out.println("you can't enter 0 for a");
        }
        d = (b*b - 4*a*c);
        if (a != 0)
        {
            if (d == 0) {
                r = -b / (2*a);
                System.out.println("Therefore the roots are "+r+" and "+r);
            }
            else if (d > 0) {
                r1 = (-b + Math.sqrt(b*b - 4*a*c)) / (2*a);
                r2 = (-b - Math.sqrt(b*b - 4*a*c)) / (2*a);
                System.out.println("Roots are "+r1+" and "+r2);
            }
        }
    }
}

```


else {

$$p = (-b)/(2*a);$$

$$q = \text{Math.sqrt}(\text{Math.abs}(b)/(2*a));$$

System.out.println("the first root" + p + "i" + q);

System.out.println("the second root" + p + "-i" + q);

}

}

}

}

the second root is $0.0 - i0.8660254037844386$

C:\Users\BMSCECSEIL74\Desktop\1BM21CS007>java quadratic
enter the coefficient of x^2 which is a:

2
enter the coefficient of x which is b:

2
enter the constant c:

2
the first root is $0.0 + i0.8660254037844386$

the second root is $0.0 - i0.8660254037844386$

C:\Users\BMSCECSEIL74\Desktop\1BM21CS007>1

'1' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\BMSCECSEIL74\Desktop\1BM21CS007>java quadratic
enter the coefficient of x^2 which is a:

1
enter the coefficient of x which is b:

5
enter the constant c:

3
therefore the roots are -0.6972243622680054 and -4.302775637731995

C:\Users\BMSCECSEIL74\Desktop\1BM21CS007>java gaudratic
Error: Could not find or load main class gaudratic

C:\Users\BMSCECSEIL74\Desktop\1BM21CS007>java quadratic
enter the coefficient of x^2 which is a:

2
enter the coefficient of x which is b:

8
enter the constant c:

9
the first root is $-2.0 + i0.7071067811865476$

the second root is $-2.0 - i0.7071067811865476$

C:\Users\BMSCECSEIL74\Desktop\1BM21CS007>java quadratic
enter the coefficient of x^2 which is a:

1
enter the coefficient of x which is b:

4
enter the constant c:

1
therefore the roots are -0.2679491924311228 and -3.732050807568877

C:\Users\BMSCECSEIL74\Desktop\1BM21CS007>java quadratic
enter the coefficient of x^2 which is a:

1
enter the coefficient of x which is b:

2
enter the constant c:

1
therefore the roots are -1.0 and -1.0

C:\Users\BMSCECSEIL74\Desktop\1BM21CS007>_