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```
char c='a';
i2=c;
System.out.println("char to int conversion");
System.out.println(c+" "+i2);}
}
```

⑦ Quadratic

```
import java.util.Scanner;
class Quadratic
{
 int a, b, c;
double r1, r2, d;
void getd()
  {
    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 eq");
System.out.println("enter a non-zero 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 equal and real");
System.out.println("Root1 = root2 = "+r1);
}
else if (d>0)
{
r1 = ((-b) + (Math.sqrt(d))) / (double)(2*a);
r2 = ((-b) - (Math.sqrt(d))) / (double)(2*a);
System.out.println("Roots are real and distinct");
System.out.println("Root1 = "+r1+ "Root2 = "+r2);
}
else if (d<0)
{
System.out.println("Roots are imaginary");
r1 = (-b) / (2*a);
r2 = Math.sqrt(-d) / (2*a);
System.out.println("Root1 = "+r1+ " +i" +r2);
System.out.println("Root2 = "+r1+ " -i" +r2);
}
}
}
class QuadraticMain
{
public static void main(String args[])
{
Quadratic q = new Quadratic();
q.getd();
q.compute();
}
}
```

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Output

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Enter values of a, b, c

1

2

1

roots are real and equal

root1 = root2 = -1

(b) Enter values of a, b, c

1

-3

2

roots are real and distinct

root 1 = 2.0

root 2 = 1.0

(c) Enter values of a, b, c

1

1

2

roots are imginary

(d) Enter values of a, b, c

0

4

2

roots cannot be formed.

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