```java
public class Divisors {
    public static void main (String[] args) {
        int x = Integer.parseInt(args[0]);
        for(int i = 1; i <= x; i++) {
            if((x % i) == 0) {
                System.out.println(i);
            }
        }
    }
}
```

```java
public class Reverse {
    public static void main (String[] args){
        String s = args[0];
        int n = s.length();
        for(int i = 0; i < n; i++) {
            System.out.print(s.charAt(n-1-i));
        } System.out.println();
        if(n%2 != 0) {
            System.out.println("The middle character is " + s.charAt((n-1)/2));
        } else {
            System.out.println("The middle character is " + s.charAt((n/2)-1));
        }
    }
}
```

```java
public class InOrder {
    public static void main (String[] args) {
        int x = (int) (Math.random() * 10);
        System.out.print(x + " ");
        int y = (int) (Math.random() * 10);
        while(y >= x) {
            System.out.print(y + " ");
            x = y;
            y = (int) (Math.random() * 10);
        }
    }
}
```

```java
public class Perfect {
    public static void main (String[] args) {
        int N = Integer.parseInt(args[0]);
        int sum = 1;
        String s =  N + " is a perfect number since " + N + " = 1";
        for(int i = 2; i < N; i++) {
            if(N % i == 0) {
                s = s + " + " + i;
                sum = sum + i;
            }
        }
        if (sum == N) {
            System.out.println(s);
        } else {
            System.out.println(N + " is not a perfect number");
        }
    }
}
```

```java
public class DamkaBoard {
    public static void main(String[] args) {
        int n = Integer.parseInt(args[0]);
        String s1 = "";
        String s2 = "";
        for(int i=0; i<n; i++) {
            s1 = s1 + "* ";
            s2 = s2 + " *";
        }
        for(int k=0; k<n; k++) {
            if(k%2 == 0) {
                System.out.println(s1);
            } else {
                System.out.println(s2);
            }
        }
    }
}
```

```java
public class OneOfEachStats {
    public static void main (String[] args) {
        int seed = Integer.parseInt(args[1]);
        Random generator = new Random(seed);
        int T = Integer.parseInt(args[0]);
        int twoChildren = 0;
        int threeChildren = 0;
        int fourOrMoreChildren = 0;
        int totalchildren = 0;
        for(int i=0; i<T; i++) {
            boolean itisaboy = false;
            boolean itisagirl = false;
            int sum = 0;
            while(!itisaboy || !itisagirl) {
                if(generator.nextDouble() < 0.5) {
                    sum++;
                    itisaboy = true;
                } else {
                    sum++;
                    itisagirl = true;
                }
            }
            totalchildren = totalchildren +sum;
            if(sum == 2) {
                twoChildren++;
            } else if(sum == 3) {
                threeChildren++;
            } else {
                fourOrMoreChildren++;
            }
        }
        double average = (double) totalchildren / T;
        int max = Math.max(twoChildren,
Math.max(threeChildren,fourOrMoreChildren));
        String common = "";
        if(max == twoChildren){
            common = "2";
        } else if (max == threeChildren ) {
            common = "3";
        } else {
            common = "4 or more";
        }
        System.out.println();
        System.out.println("Average: " + average +  " children to get at least one
of each gender.");
        System.out.println("Number of families with 2 children: " + twoChildren);
        System.out.println("Number of families with 3 children: " + threeChildren);
        System.out.println("Number of families with 4 or more children: " +
fourOrMoreChildren);
```

```java
        System.out.println("The most common number of children is " + common
+ ".");
    }
}
```