

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

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

```
public class InOrder {
    public static void main (String[] args) {
        int time = (int)(10*Math.random() + 1); // לבדוק כמה פעמים
        int firstnum=(int)(10*Math.random());
        int num=0;
        System.out.print(firstnum);
        System.out.print(" ");
        int i=1;
        while (i<time) {
            num = (int)(10*Math.random());
            if (num>=firstnum) {
                System.out.print(num);
                System.out.print(" ");
                firstnum=num;
                i++;
            }
        }
    }
}
```

```
public class DamkaBoard {  
    public static void main(String[] args) {  
        int n = Integer.parseInt(args[0]);  
        for(int i=1; i<=n; i++){  
            for(int j=1; j<=n; j++){  
                if(i%2==0){  
                    System.out.print(" *");  
                }else{  
                    System.out.print("* ");  
                }  
            }  
            System.out.println();  
        }  
        System.out.println();  
    }  
}
```

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

```

import java.util.Random;

public class OneOfEachStats {

    public static void main (String[] args) {
        int T = Integer.parseInt(args[0]);
        int seed = Integer.parseInt(args[1]);
        Random generator = new Random(seed);
        double rnd = generator.nextDouble();

        int familiesNum = T;
        double firstBorn = rnd;
        double girlorboy= generator.nextDouble();
        int sum=1;

        double average=0;
        int twokids=0;
        int treekids=0;
        int fourormorekids=0;

        for(int i=0; i<familiesNum; i++){
            if(firstBorn>=0 && firstBorn<0.5){
                while (girlorboy>0 && girlorboy<0.5) {
                    sum++;
                    girlorboy = generator.nextDouble();
                }
                sum++;
            } else {
                while (girlorboy>=0.5 && girlorboy<1) {
                    sum++;
                    girlorboy = generator.nextDouble();
                }
                sum++;
            }
            average+=sum;
            if(sum==2) twokids++;
            if(sum==3) treekids++;
            if(sum>=4) fourormorekids++;
            firstBorn = generator.nextDouble();
            girlorboy = generator.nextDouble();
            sum =1;
        }

        System.out.println("Average: "+
average/(double)familiesNum + " children to get at least one
of each gender.");
        System.out.println("Number of families with 2
children: "+ twokids);
    }
}

```

```
        System.out.println("Number of families with 3
children: "+ treekids);
        System.out.println("Number of families with 4 or more
children: "+ fourormorekids);
        if (twokids>treekids && twokids>fourormorekids)
System.out.println("The most common number of children is
2.");
        if (twokids>treekids && twokids==fourormorekids)
System.out.println("The most common number of children is
2.");
        if (twokids==treekids && twokids>fourormorekids)
System.out.println("The most common number of children is
2.");
        if (twokids==treekids && twokids==fourormorekids)
System.out.println("The most common number of children is
2.");

        if (treekids>twokids && treekids>fourormorekids)
System.out.println("The most common number of children is
3.");
        if (treekids>twokids && treekids==fourormorekids)
System.out.println("The most common number of children is
3.");

        if (fourormorekids>twokids && fourormorekids>treekids)
System.out.println("The most common number of children is 4 or
more.");
    }
}
```