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

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

                          }
                 }
        }
}
```

```
public class InOrder {
        public static void main (String[] args) {
                int num =(int) (10* Math.random()) ;
                int j = -1;
                while(num>j){
                   System.out.print(num + " ");
                   j =num;
                   num = (int) (10 * Math.random());

         }


        }
}
```

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

```
public class Perfect {
        public static void main (String[] args) {
                int num = Integer.parseInt(args[0]);
                int i = 0;
                int num2 =0;
                for (i=1; i<num ;i++){
          if (num%i == 0){
           num2 = num2 + i;
     }
    }
       if (num == num2){
          System.out.print(num + " is a perfect number since " + num + " = " + 1);
          for (i=2; i<num ;i++){
             if (num%i == 0){
                System.out.print( " + " + i );
     }
    }
                }

                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);
            int boys = 0;
            int girl = 0;
            int kid2 = 0;
            int kid3 = 0;
            int kid4 = 0;
            int sum = 0;
            double sumAll= 0;
            for(int i = 0; i<t; i++){
        while (boys == 0 || girl == 0){
                    double num = generator.nextDouble();
                    if (num <= 0.5){
             boys ++;
                    } else {
                       girl ++;
            }
            if (girl >= 1 && boys >= 1){
               sum = boys + girl;
            }
   }
            sumAll = sumAll + sum;
            if (sum == 2){
        kid2++;
```

```
            }
            if (sum == 3){
        kid3++;
            }
            if (sum >= 4){
        kid4++;
            }
            boys = 0;
            girl = 0;
      }
            double avr = sumAll/t;



            System.out.println("Average: " + avr + " children to get at least one of each
gender.");
            System.out.println("Number of families with 2 children: " + kid2);
            System.out.println("Number of families with 3 children: " + kid3);
            System.out.println("Number of families with 4 or more children: " + kid4);



            if (kid2 > kid3 && kid2 > kid4) {
        System.out.println("The most common number of children is " + 2 + ".");

            } else
            if (kid3 > kid2 && kid3 > kid4) {
               System.out.println("The most common number of children is " + 3 + ".");

            }  else
            System.out.println("The most common number of children is 4 or more.");
   }
```

```
}
```