```java
public class InOrder {
   public static void main(String args []) {

          boolean stop = true;
          int ran = 0;
          int lastnum = 0;


     while (stop) {

         ran =(int)( Math.random()* 10);

           if(ran >= lastnum){
                  System.out.print( ran + " ");
                  lastnum = ran;
           }
           else{
                  stop = false;
           }
     }
   }
  }

```

```
public class Reverse {
   public static void main(String args []) {
           String s = (args[0]);
           int lastletter = (s.length ()-1);
           int length= s.length();
           int middle;

           if ( length % 2 == 0) {
                   middle = (s.length () / 2 -1);
           } else {
                   middle = (s.length () / 2 );
           }

          while ( lastletter >= 0) {
           System.out.print( s.charAt(lastletter));
            lastletter = lastletter - 1; }
           System.out.println();
           System.out.println("The middle character is " + s.charAt( middle));
            }
   }
```

```
public class InOrder {
   public static void main(String args []) {

          boolean stop = true;
          int ran = 0;
          int lastnum = 0;

     while (stop) {
         ran =(int)( Math.random()* 10);

           if(ran >= lastnum){
                  System.out.print( ran + " ");
                  lastnum = ran;
           } else {
                  stop = false;
           }
     }
   }
  }

```

```java
public class DamkaBoard {
   public static void main(String args []) {
           int n = Integer.parseInt (args[0]);
         String dot = "* ";
           String dot2= " *";

           for (int i = 1; i <= n ; i++)  {
                 for (int j = 1; j<= n; j++) {
                        if (i % 2 ==1) {
                        System.out.print(dot);
                        } else {
                        System.out.print(dot2);
                        }
                 }
                 System.out.println();
            }
       }
     }

```

```java
public class Perfect {
   public static void main(String args []) {
           int n = Integer.parseInt (args[0]);
           int sum= 0;
     String perfect = n + " is a perfect number since " + n + " = 1";

           for (int i = 2; i < n ; i++)  {
                 if (n % i== 0) {
                 sum = sum + i;
                 perfect = perfect + " + "+ i;
                 }
            }

            if (sum + 1 == n) {
                   System.out.println (perfect);
            } else {
    System.out.println (n + " is not a perfect number");
            }
       }
     }

```

```java
import java.util.Random;
public class OneOfEachStats {
   public static void main (String[] args) {
          // Gets the two command-line arguments
          int T = Integer.parseInt(args[0]);
          int seed = Integer.parseInt(args[1]);
          // Initailizes a random numbers generator with the given seed value
        Random generator = new Random(seed);

          int total=0 ;
          int twoKids=0;
          int threeKids=0;
          int fourOrMore=0;

          for (int i=0; i<T; i++) {
          boolean girl= true;
          boolean boy= true;
          int kids= 0;
          int numOfKids=0;

           while (girl || boy) {
                  double rnd = generator.nextDouble();
                   if (rnd < 0.5) {
                   girl= false;
                   kids++;
                   } else {
                          boy= false;
                  kids++;
                   }
                   total ++;
                 numOfKids++;
           }
          switch(numOfKids) {
                 case 2:
                        twoKids++;
                        break;
                 case 3:
                        threeKids++;
                        break;
                 default:
                        fourOrMore++;
                        break;
                 }
          }
            int mostCom = Math.max(Math.max(twoKids, threeKids), fourOrMore);
           double avarage = (double) total / T;

        System.out.println("Average: " +avarage+ " 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: " + threeKids);
           System.out.println("Number of families with 4 or more children: "+ fourOrMore);

            if (mostCom== twoKids) {
           System.out.println("The most common number of children is 2.");
           } else if (mostCom== threeKids) {
                  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.");
           }
      }
     }

```