```
public class Divisors {
   public static void main(String[] var0) {
      int var1 = Integer.parseInt(var0[0]);
      for(int var2 = 1; var2 <= var1; ++var2) {
         if (var1 % var2 == 0) {
            System.out.println(var2);
         }
      }
   }
}
```

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

```
import java.util.Random;

public class InOrder {
    public static void main(String[] args) {
        Random r1 = new Random();
        int rand_int1 = r1.nextInt(0,10);
        System.out.print(rand_int1 + " ");
        int rand_int2 = r1.nextInt(0,10);
        while (rand_int2 >= rand_int1) {
            System.out.print(rand_int2 + " ");
            rand_int1 = rand_int2;
            rand_int2 = r1.nextInt(0,10);
        }
    }
}
```

```
public class Perfect {
    public static void main(String[] args) {
        int var1 = Integer.parseInt(args[0]);
        int sum = 0;
        String s = var1 + " is a perfect number since " + var1;
        for(int var2 = 1; var2 < var1; var2++) {
            if (var1 % var2 == 0) {
                if (var2 == 1) {
                    s += " = " + var2;
                    sum += var2;
                }
                else {
                    s += " + " + var2;
                    sum += var2;
                }
            }
        }
        if (sum == var1) {
            System.out.println(s);
        }
        else {
            System.out.println(var1 + " is not a perfect number");
        }
    }
}
```

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

```
import java.util.Random;

public class OneOfEach {
    public static void main(String[] args) {
        Random r1 = new Random();
        int boy = 0;
        int girl = 1;
        boolean have_boy = false;
        boolean have_girl = false;
        int count = 0;
        while (have_boy == false || have_girl == false) {
            count++;
            int rand = r1.nextInt(0,2);
            if (rand == boy) {
                System.out.print("b ");
                have_boy = true;
            }
            else {
                System.out.print("g ");
                have_girl = true;
            }
        }
        System.out.println();
        System.out.println("You made it... and you now have " + count
+ " children.");
    }
}
```

```
import java.util.Random;

public class OneOfEachStats1 {
    public static void main(String[] args) {

        int times = Integer.parseInt(args[0]);
        double avg = 0;
        double countall = 0.0; // all the children
        int count_this = 0; // the children in a specific family
        int num_2 = 0;
        int num_3 = 0;
        int num_4 = 0;
        // boy will be 0 girl will be 1
        for (int i=0; i<times; i++) {
            Random r1 = new Random();
            boolean have_boy = false;
            boolean have_girl = false;
            while (have_boy == false || have_girl == false) {
                countall++;
                count_this++;
                int rand = r1.nextInt(0,2);
                if (rand == 0) {
                    have_boy = true;
                }
                else {
                    have_girl = true;
                }
            }
            have_boy = false;
            have_girl = false;
            if (count_this == 2) {
                    num_2++;
                } else if (count_this == 3) {
                    num_3++;
                }
                else {
                    num_4++;
                }
            count_this = 0;
        }
        avg = countall/times;
        System.out.println("Average: " + avg + " children to get at
least one of each gender.");
        System.out.println("Number of families with 2 children: " +
num_2);
        System.out.println("Number of families with 3 children: " +
num_3);
```

```
        System.out.println("Number of families with 4 or more
children: " + num_4);
        if (num_2 >= num_3 && num_2 >= num_4) {
            System.out.println("The most common number of children is
2.");
        }
        else if (num_3 >= num_2 && num_3 >= num_4) {
            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.");

        }
    }
}
```