

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

```
public class Reverse {
    public static void main(String[] args) {
        String s = (args[0]);

        int right = s.length() - 1;
        int left = 0;

        for (int m = right; m >= 0; m--) {
            System.out.print(s.charAt(m));
        }

        System.out.println(); // Move to the next line

        if (s.length() % 2 == 0) {

            System.out.println("The middle character is " +
s.charAt((s.length() / 2) - 1));

        } else if (s.length() % 2 != 0) {

            System.out.println("The middle character is " +
s.charAt((s.length() / 2)));

        }

    }
}
```

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

```
/**
 * Gets a command-line argument n (int), and prints an n-by-n
 * damka board.
 */
public class DamkaBoard {
    public static void main(String[] args) {

        int num = Integer.parseInt(args[0]);
        for(int i = 1; i <= num; i++) {

            for(int j = 1; j<= num; j++) {
                if (i % 2 == 0) {
                    System.out.print(" *");
                } else {
                    System.out.print("* ");
                }
            }

            System.out.println(); // לרדת שורה

        }
    }
}
```

```
public class Perfect {
    public static void main (String[] args) {
        int num = Integer.parseInt(args[0]);
        String sSum = " = 1";
        int sum = 1;

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

        if (sum == num) {
            System.out.println(num + " is a perfect number since " +
num + sSum);
        } else {
            System.out.println(num + " is not a perfect number");
        }
    }
}
```

```

public class OneOfEach {
    public static void main (String[] args) {
        double x = Math.random();
        boolean chanceGirl = (x >= 0 && x < 0.5);
        boolean chanceBoy = (x >= 0.5 && x < 1);
        int sum = 0;

        if (chanceGirl) {
            while(chanceGirl) {
                System.out.print( "g ");
                sum++;
                x = Math.random();
                chanceGirl = (x >= 0 && x < 0.5);
            }
            System.out.print( "b");
            sum++; // יצאנו מהלולאה כי קיבלנו בן ולכן הוספנו אותו לסכום
        } else {
            while(chanceBoy) {
                System.out.print("b ");
                sum++;
                x = Math.random();
                chanceBoy = (x >= 0.5 && x < 1);
            }
            System.out.print( "g");
            sum++;
        }

        System.out.println();
        System.out.println("You made it ... and you now have "
+ sum + " children.");
    }
}

```

```

public class OneOfEachStats1 {
    public static void main (String[] args) {
        int numberOfFamilies = Integer.parseInt(args[0]);
        double x = Math.random();
        boolean chanceGirl = (x >= 0 && x < 0.5);
        boolean chanceBoy = (x >= 0.5 && x < 1);
        int sum = 0;

        double average = 0;
        int twoKids = 0;
        int threeKids = 0;
        int fourkidsOrMore = 0;

        for(int i = 1; i <= numberOfFamilies; i++) {

            if (chanceGirl==true) {
                while(chanceGirl==true) {
                    sum++;
                    x = Math.random();
                    chanceGirl = (x >= 0 && x < 0.5);
                }

                sum++; // יצאנו מהלולאה כי קיבלנו בן ולכן הוספנו אותו לסכום

            } else {
                while(chanceBoy==true) {
                    sum++;
                    x = Math.random();
                    chanceBoy = (x >= 0.5 && x < 1);
                }
                sum++;
            }

            average += sum; // לסכום את כל הילדים מכל המשפחות
            if(sum == 2) twoKids++;
            if(sum == 3) threeKids++;
            if(sum >=4) fourkidsOrMore++;
            x = Math.random();
            chanceGirl = (x >= 0 && x < 0.5);
            chanceBoy = (x >= 0.5 && x < 1);
            sum = 0;

        }

        System.out.println("Average:" + (average /
numberOfFamilies) + " 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: " + fourkidsOrMore);
        int max = (Math.max(Math.max(twoKids, threeKids),
fourkidsOrMore));
        if (max == twoKids) System.out.println("The most
common number of children is 2.");
        if (max == threeKids) System.out.println("The most
common number of children is 3.");
        if (max == fourkidsOrMore) System.out.println("The
most common number of children is 4 or more.");

    }
}
```



```

import java.util.Random;

public class OneOfEachStats {
    public static void main (String[] args) {
        // Gets the two command-line arguments
        int numberOfFamilies = Integer.parseInt(args[0]);
        int seed = Integer.parseInt(args[1]);
        // Initializes a random numbers generator with the
        given seed value
        Random generator = new Random(seed);
        double rnd = generator.nextDouble();
        boolean chanceGirl = (rnd >= 0 && rnd < 0.5);
        boolean chanceBoy = (rnd >= 0.5 && rnd < 1);
        int sum = 0;

        double average = 0;
        int twoKids = 0;
        int threeKids = 0;
        int fourkidsOrMore = 0;

        for(int i = 1; i <= numberOfFamilies; i++) {

            if (chanceGirl==true) {
                while(chanceGirl==true) {
                    sum++;
                    rnd = generator.nextDouble();
                    chanceGirl = (rnd >= 0 && rnd < 0.5);
                }

                sum++; // יצאנו מהלולאה כי קיבלנו בן ולכן הוספנו אותו לסכום

            } else {
                while(chanceBoy==true) {
                    sum++;
                    rnd = generator.nextDouble();
                    chanceBoy = (rnd >= 0.5 && rnd < 1);
                }
                sum++;
            }

            average += sum; // לסכום את כל הילדים מכל המשפחות
            if(sum == 2) twoKids++;
            if(sum == 3) threeKids++;
            if(sum >=4) fourkidsOrMore++;
            rnd = generator.nextDouble();
            chanceGirl = (rnd >= 0 && rnd < 0.5);
            chanceBoy = (rnd >= 0.5 && rnd < 1);
        }
    }
}

```

```
        sum = 0;

    }

    System.out.println("Average: " + (average /
numbersOfFamilies) + " 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: " + fourkidsOrMore);
    int max = (Math.max(Math.max(twoKids, threeKids),
fourkidsOrMore));
    if (max == twoKids) System.out.println("The most
common number of children is 2.");
    if (max == threeKids) System.out.println("The most
common number of children is 3.");
    if (max == fourkidsOrMore) System.out.println("The
most common number of children is 4 or more.");

    }

}
```