```java
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);}
            }

    }
}
```

```java
public class Reverse {
    public static void main (String[] args){
        String theWord= args[0];
        int theWordLen= theWord.length();
        String newWord = "";
        for (int i = (theWordLen-1) ;i >=0; i--) {
            char theChar = theWord.charAt(i);
            newWord += theChar;
        }
        System.out.println(newWord);
        System.out.println("The middle character is " + newWord.charAt(((theWordLen/2))));
    }
}
```

```java
public class InOrder {
    public static void main (String[] args) {
        int firstNum= ((int)(Math.random() * (10)));
        System.out.print(firstNum);
        int secNum = 0;
        do {
            secNum= ((int)(Math.random() * (10)));
            if (secNum > firstNum) {
                System.out.print(" " + secNum);}
            firstNum = secNum;
        } while (secNum > secNum);
    }
}
```

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

}
```

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

```java
public class OneOfEach {
    public static void main (String[] args) {
        boolean girl = false; //at list one girl
        boolean boy = false; //at list one girl
        int numChildren = 0;
        while (girl == false || boy == false) {
            double result = Math.random();
            // System.out.println(result);
            if (result > 0.5) {
                girl = true;
                System.out.print("g ");
                numChildren += 1;
            } else {
                boy = true;
                System.out.print("b ");
                numChildren += 1;

            }

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

```java
public class OneOfEachStats1 {
    public static void main (String[] args) {
        int T = Integer.parseInt(args[0]);
        double sumChildren = 0;
        int num2Children = 0;
        int num3Children = 0;
        int numManyChildren =0;
        for (int i = 1;i < T ;i++) {
            boolean girl = false; //at list one girl
            boolean boy = false; //at list one girl
            int numChildren = 0;
            while (girl == false || boy == false) {
                double result = Math.random();
                // System.out.println(result);
                if (result > 0.5) {
                    girl = true;
                    numChildren += 1;
                } else {
                    boy = true;
                    numChildren += 1;
                }
                if (numChildren == 2) {
                    num2Children += 1;
                }else if (numChildren == 3) {
                    num3Children += 1;
                }else if (numChildren > 3) {
                    numManyChildren += 1;
                    }
                }
                sumChildren += numChildren;
            }
        double avreage = sumChildren/ T;
        System.out.println("Average: " + avreage + " children to get at least one of each gender.");
        System.out.println("Number of families with 2 children: " + num2Children);
        System.out.println("Number of families with 3 children: " + num3Children);
        System.out.println("Number of families with 4 or more children: " + numManyChildren);
        if (num2Children > num3Children && num2Children > numManyChildren) {
             System.out.println("The most common number of children is 2.");
        }else if (num3Children > num2Children && num3Children > numManyChildren) {
             System.out.println("The most common number of children is 3.");
        }else if (numManyChildren > num2Children && numManyChildren > num3Children) {
             System.out.println("The most common number of children is 4 or more.");
            }
    }
}
```

```java
        double avreage = sumChildren/ T;
        System.out.println("Average: " + avreage + " children to get at least one of each gender.");
        System.out.println("Number of families with 2 children: " + num2Children);
        System.out.println("Number of families with 3 children: " + num3Children);
        System.out.println("Number of families with 4 or more children: " + numManyChildren);
        if (num2Children > num3Children && num2Children > numManyChildren) {
             System.out.println("The most common number of children is 2.");
        }else if (num3Children > num2Children && num3Children > numManyChildren) {
             System.out.println("The most common number of children is 3.");
        }else if (numManyChildren > num2Children && numManyChildren > num3Children) {
             System.out.println("The most common number of children is 4 or more.");
            }
    }
}
```