```
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 word = args[0];
		String reverse = "";
		 for(int i = word.length() - 1; i >= 0; i--) {
			reverse = reverse + word.charAt(i);
		 }
		 int middle = (word.length() / 2);
		 if (word.length() % 2 == 0){
			middle = (word.length()-1) / 2;
		 }
		 System.out.println(reverse + "\n" + "The middle character is " +
word.charAt(middle));
	}
}
```

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

			int firstNumber =  (int) (Math.random() * 10 );
		System.out.print(firstNumber);
		int secondNumber = (int) (Math.random() * 10);

		if (secondNumber >= firstNumber ) {
			System.out.print(" " + secondNumber );
			int thirdNumber = (int) (Math.random() * 10);
			if (thirdNumber >= secondNumber) {
				System.out.print(" " + thirdNumber);
				firstNumber = secondNumber;
				secondNumber = thirdNumber;
			}

		}
	}
}
```

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

                        }
                }
                System.out.println();
        }
    }
}
```

```
public class OneOfEach {
	public static void main (String args[]) {
		int count = 0;
		boolean boy = false;
		boolean girl = false;
	while (!(boy && girl)) {
		double generate = Math.random();
		if (generate >= 0.5) {
			boy = true;
			System.out.print("b ");

		} else  {
			girl = true;
	  System.out.print("g ");
	}
	count += 1;
		}
		System.out.println();
		System.out.println("You made it... and you now have " + count + "
children.");
	}

	}
```

```
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]);
                // Initializes a random numbers generator with the given seed value
      Random generator = new Random(seed);

                   int count = 0;
                        int twokids = 0;
                        int threekids = 0;
                        int fourplus = 0;
          boolean boy = false;
                   boolean girl = false;
                   double avg = 0.0;
                for (int i =1; i <= T; i++ ) {

             while (!(boy && girl)) {
                   double rnd = generator.nextDouble();
                if (rnd >= 0.5) {
                        boy = true;
                } else  {
                        girl = true;

      }
      count += 1;
                }
                avg = avg + count;
```

```
                if (count == 2) {
                        twokids += 1;
                  } else if (count == 3 ) {
                          threekids += 1;
                     } else if (count >= 4) {
                             fourplus += 1;
                    }
                    boy = false;
                    girl = false;
                    count = 0;
                }
                int mode = Math.max(fourplus, Math.max (threekids, twokids));
                if (mode == fourplus){
                        mode = 4;
                } else if (mode == threekids) {
                        mode = 3;
                } else {
                        mode = 2;
                }

                avg =  (avg / T);
                System.out.println("Average: " + avg + " 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: " +
fourplus );
                System.out.println("The most common number of children is " + mode
+ ".");
        }
                    }
```