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


		}
	}
}
```

```
public class Reverse {
	public static void main (String[] args){
		String str = args[0];
		int n = str.length() - 1;
		String r = "";

		while(n >= 0) {
			r = r + str.charAt(n);
			n-- ;
		}
		int x = (str.length()-1) / 2 ;

		System.out.println( r );
		System.out.println( "The middle character is " + str.charAt(x) ) ;
	}
}
```

```
public class InOrder {
	public static void main (String[] args) {
		int num = (int)(10 * Math.random() );
		int i = -1;

		while(i<=num) {
			System.out.print(num + " ");
			i = num ;
			num = (int)(10 * Math.random() );
		}
	}
}
```

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

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

```
public class OneOfEachStats {
public static void main (String[] args) {
	int T = Integer.parseInt(args[0]);
	int seed = Integer.parseInt(args[1]);
	Random generator = new Random(seed);
	double sum = 0;
	int child2 = 0;
	int child3 = 0;
	int child4 = 0;

	for(int i = 0; i < T; i++) {
		boolean boy = true;
		int numOfChild = 1;
		double r1 = generator.nextDouble();

		if(r1 <= 0.5) {
			while(boy == true) {
			r1 = generator.nextDouble();
			numOfChild += 1;
				if(r1 <= 0.5) {
				boy = true;
				}
				else {
					boy = false;
				}
			}

			sum = sum + numOfChild ;
		}

		else {
			boy = false;
			while(boy == false) {
				r1 = generator.nextDouble();
				numOfChild += 1;
				if(r1 <= 0.5) {
					boy = true;
				}
				else {
					boy = false;
				}
			}
			sum = sum + numOfChild ;
		}

		if (numOfChild == 2)
```

```
                child2++;
                else if (numOfChild == 3)
                child3++;
                else if (numOfChild >= 4)
                child4++;
        }

        System.out.println("Average: " + sum/T + " children to get at least one of each
gender." );
        System.out.println("Number of families with 2 children: " + child2 );
        System.out.println("Number of families with 3 children: " + child3 );
        System.out.println("Number of families with 4 or more children: " + child4 );

        if (child2 >= child3 && child2 >= child4)
                System.out.println("The most common number of children is 2.");
        else if (child3 >= child2 && child3 >= child4)
                System.out.println("The most common number of children is 3.");
        else if(child4 >= child2 && child4 >= child3)
                System.out.println("The most common number of children is 4 or more.");
        }
}
```