

Divisors:

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

Reverse:

```
public class Reverse {
    public static void main (String[] args){
        //// Put your code here
        String str = args[0];
        int length = str.length();
        int middle;
        if(length % 2 == 0){
            middle = (length/2-1);
        }
        else {
            middle = (length/2);
        }

        for(int i = length ; i > 0 ; i--){
            System.out.print(str.charAt(i-1));

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

    }
}
```

InOrder:

```
public class InOrder {
    public static void main (String[] args) {
        //// Write your code here
        int max = 0;
        int last_num = 0;

        while(max <= last_num){
            int random = (int)(Math.random() * 10 );
            last_num = random;

            if(max <= random){
                max = random;
                last_num = random;
                System.out.print(random + " ");
            }

            else{
                last_num = random;
            }

        }

    }
}
```

Perfect:

```
public class Perfect {
    public static void main (String[] args) {
        //// Put your code here
        int number = Integer.parseInt(args[0]);
        int sum = 0;
        String perfect = number + " is a perfect number since "
+ number + " = ";
        String not_perfect = number + " is not a perfect
number";

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

            if(number % i == 0){
                sum = sum + i;
                perfect = perfect + i + " + ";
            }

            if(sum == number) {
                System.out.println(perfect.substring(0,
perfect.length() -2));
            }

            else {
                System.out.println(not_perfect);
            }

        }
    }
}
```

DamkaBoard:

```
public class DamkaBoard {
    public static void main(String[] args) {
        //// Put your code here
        int numbers = Integer.parseInt(args[0]);

        for(int i = 0; i < numbers; i++){

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

            }
            else{
                for(int j = 0; j < numbers; j++){
                    System.out.print(" *");
                }

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

OneOfEach:

```
public class OneOfEach {
    public static void main (String[] args) {
        //// Put your code here
        Boolean boy = false;
        Boolean girl = false;
        int boy_count = 0;
        int girl_count = 0;

        while(!boy || !girl){

            int random = (int)(Math.random() * 2);

            if(random == 0){
                System.out.print("b ");
                boy_count ++;
                boy = true;
            }

            if(random == 1){
                System.out.print("g ");
                girl_count ++;
                girl = true;
            }

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

        }
    }
}
```

OneOfEachStats:

```
public class OneOfEachStats1 {
    public static void main (String[] args) {
        //// Put your code here
        int T = Integer.parseInt(args[0]);
        int kids = 0;
        int two_kids_counter = 0;
        int three_kids_counter = 0;
        int four_or_more_counter = 0;

        for(int i = 0; i < T; i++){

            Boolean boy = false;
            Boolean girl = false;
            int boy_count = 0;
            int girl_count = 0;

            while(!boy || !girl){

                int random = (int)(Math.random() * 2);

                if(random == 0){
                    boy_count ++;
                    boy = true;
                }

                if(random == 1){
                    girl_count ++;
                    girl = true;
                }
            }

            int sum = boy_count + girl_count;
            kids = kids + sum;

            if(sum == 2){
                two_kids_counter ++;
            }

            else{

                if(sum == 3){
                    three_kids_counter ++;
                }

                else{
                    four_or_more_counter ++;
                }
            }

        }

        Double avarage = kids/((double)T);
    }
}
```

```
        System.out.println("Average: "+ avarage + " children to get at  
least one of each gender.");  
        System.out.println("Number of families with 2 children: " +  
two_kids_counter);  
        System.out.println("Number of families with 3 children: " +  
three_kids_counter);  
        System.out.println("Number of families with 4 or more children:  
" + four_or_more_counter);  
    }  
}
```