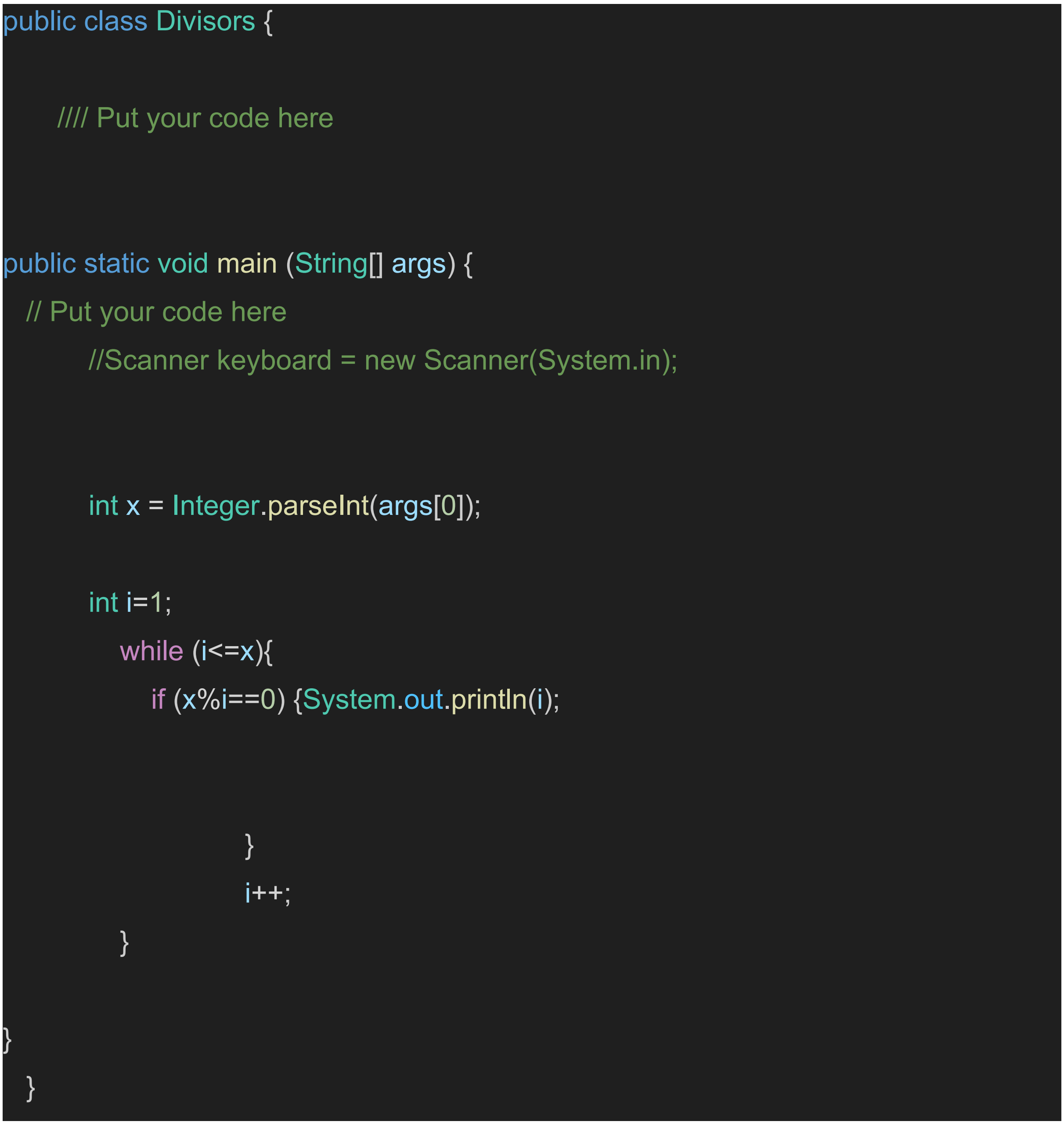
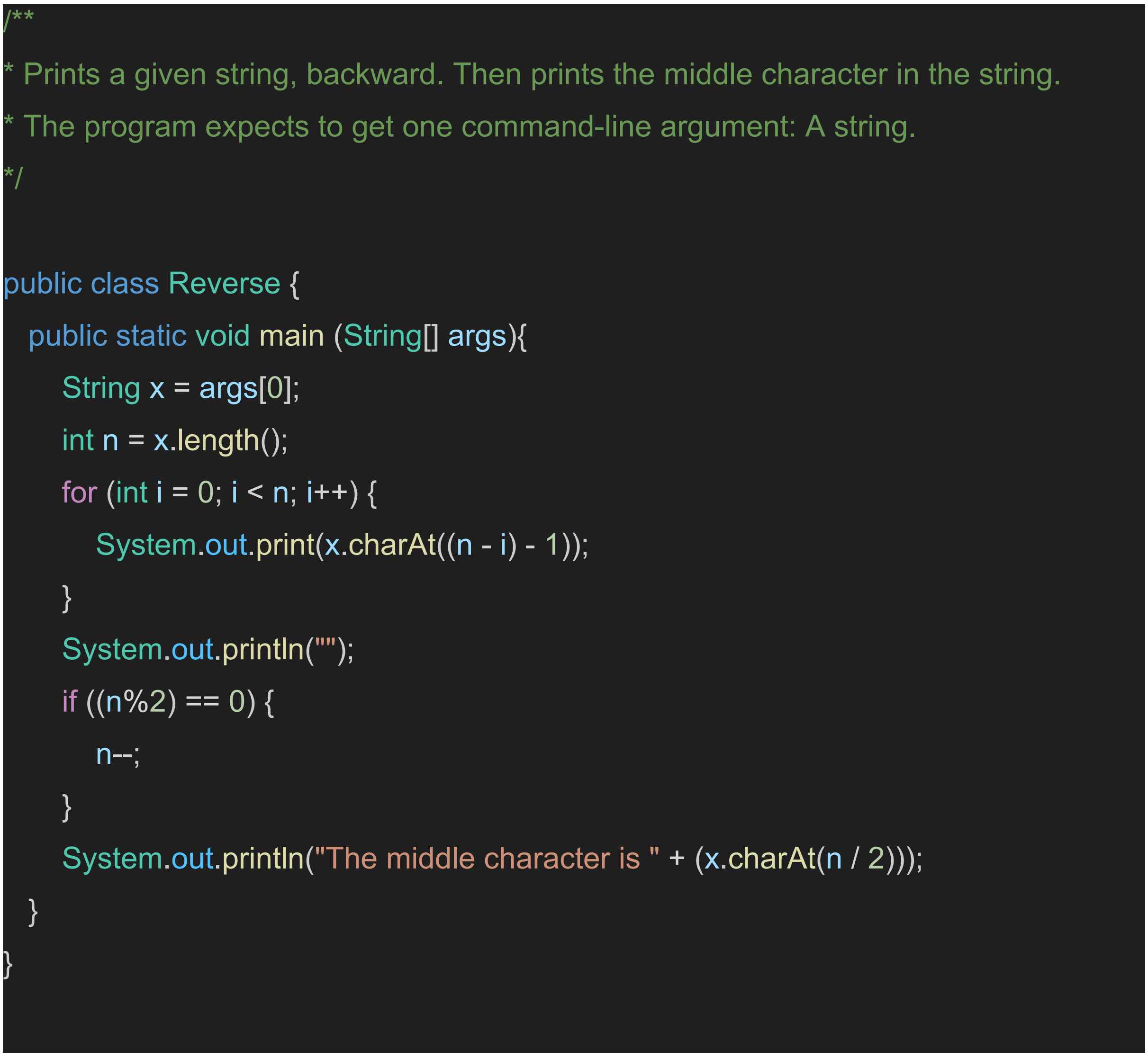
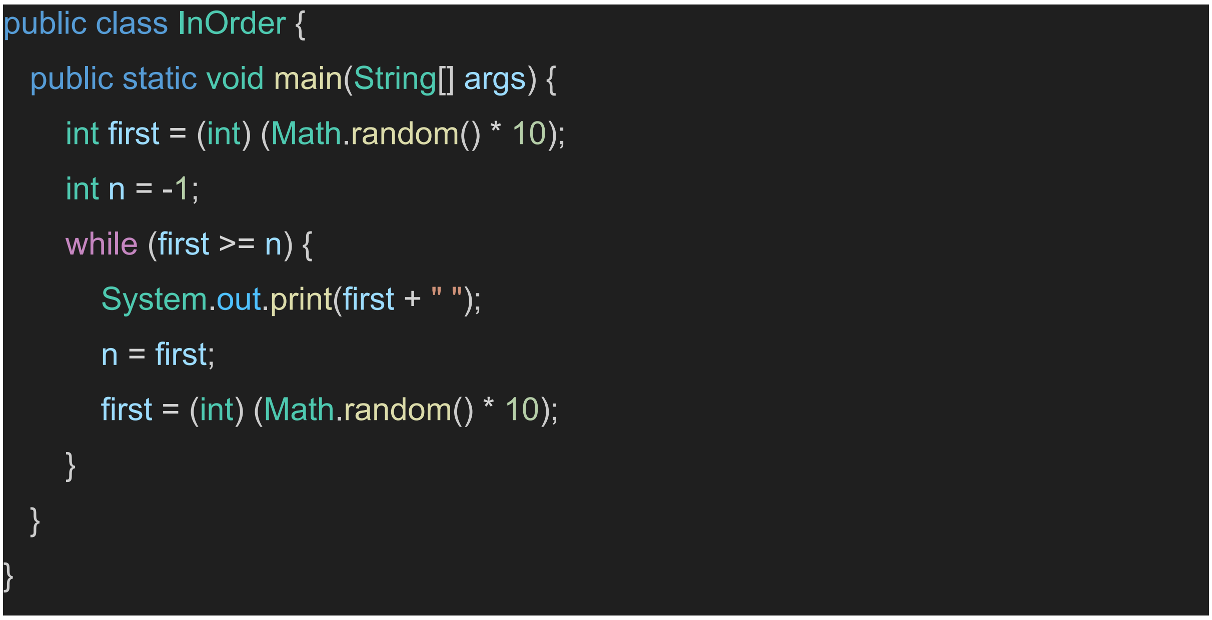


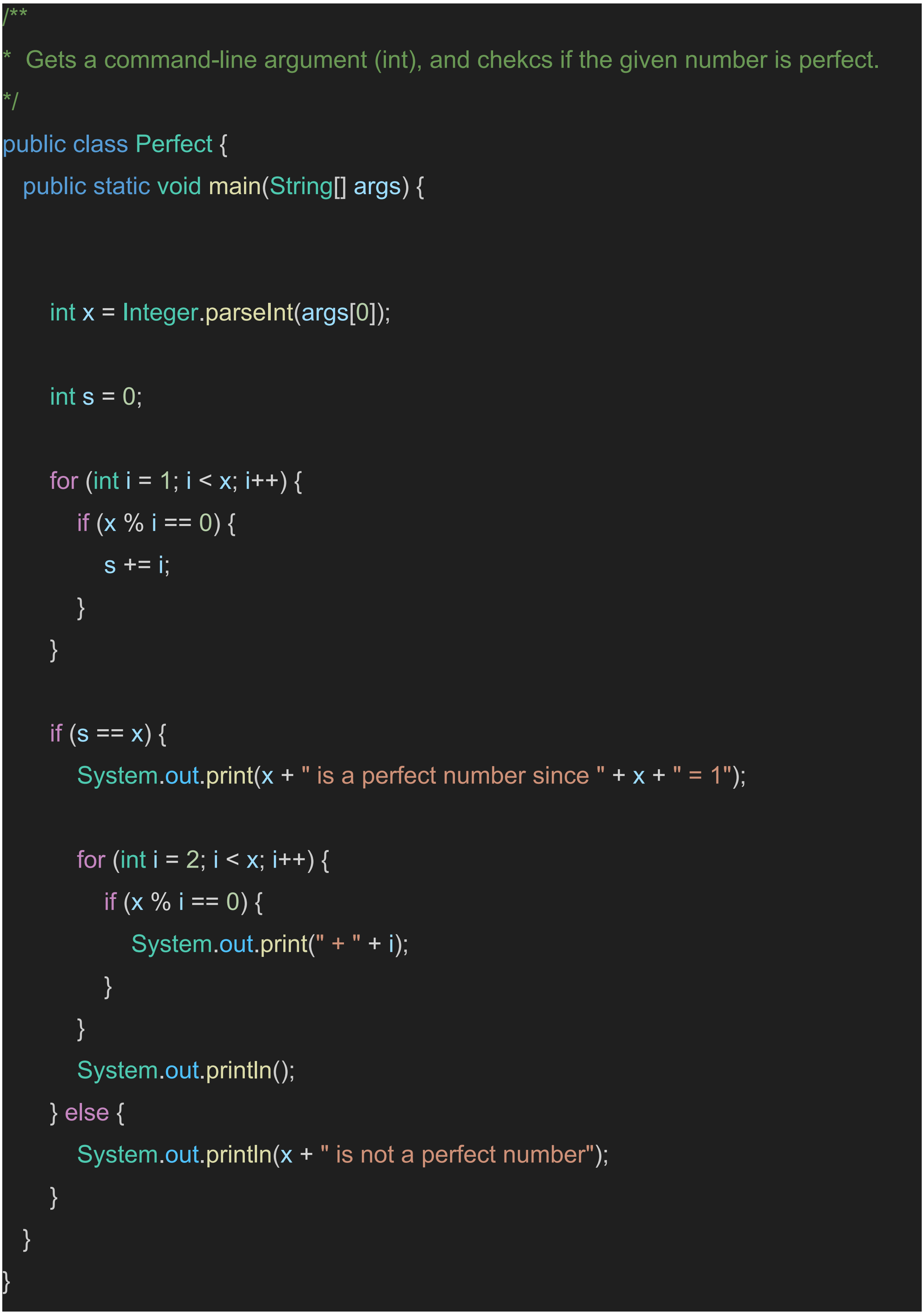
```
public class Divisors {

     //// Put your code here



public static void main (String[] args) {
  // Put your code here
        //Scanner keyboard = new Scanner(System.in);



        int x = Integer.parseInt(args[0]);

        int i=1;
           while (i<=x){
              if (x%i==0) {System.out.println(i);



                       }
                       i++;
           }

}
  }
```



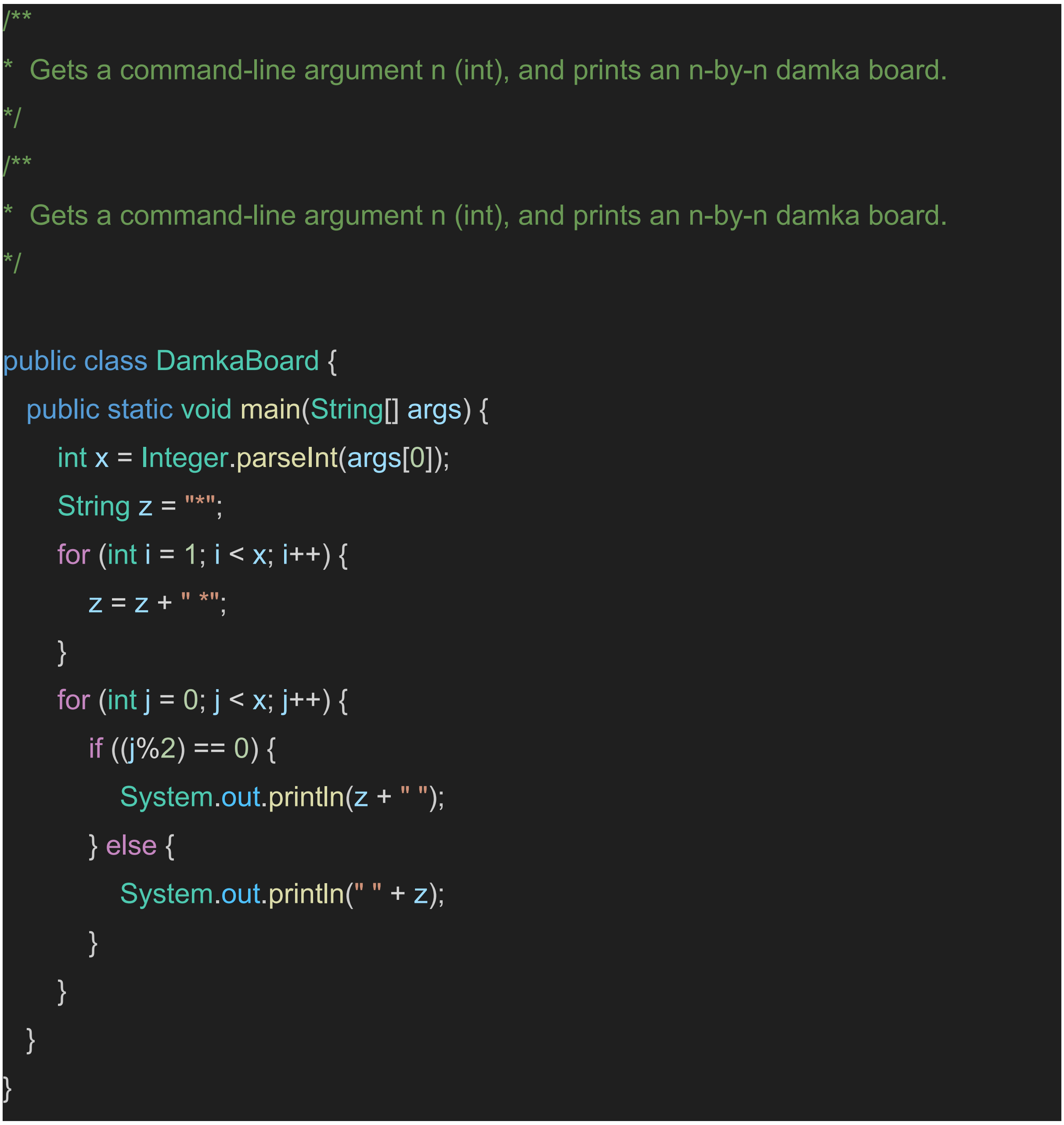
```java
/**
* Prints a given string, backward. Then prints the middle character in the string.
* The program expects to get one command-line argument: A string.
*/

public class Reverse {
    public static void main (String[] args){
        String x = args[0];
        int n = x.length();
        for (int i = 0; i < n; i++) {
            System.out.print(x.charAt((n - i) - 1));
        }
        System.out.println("");
        if ((n%2) == 0) {
            n--;
        }
        System.out.println("The middle character is " + (x.charAt(n / 2)));
    }
}
```



```java
public class InOrder {
  public static void main(String[] args) {
    int first = (int) (Math.random() * 10);
    int n = -1;
    while (first >= n) {
      System.out.print(first + " ");
      n = first;
      first = (int) (Math.random() * 10);
    }
  }
}
```

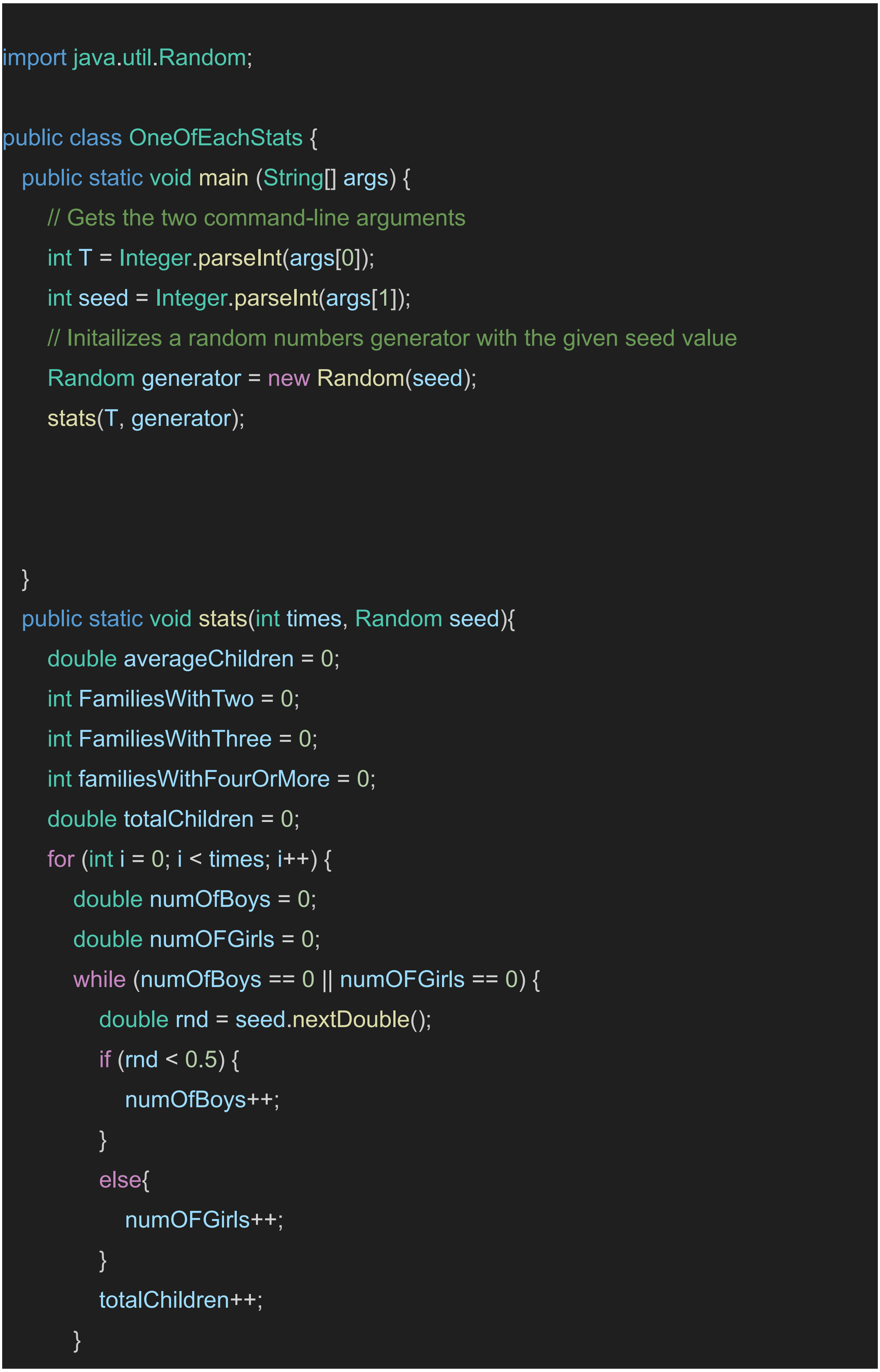


```
/**
*  Gets a command-line argument (int), and chekcs if the given number is perfect.
*/
public class Perfect {
  public static void main(String[] args) {


    int x = Integer.parseInt(args[0]);

    int s = 0;

    for (int i = 1; i < x; i++) {
      if (x % i == 0) {
        s += i;
      }
    }

    if (s == x) {
      System.out.print(x + " is a perfect number since " + x + " = 1");

      for (int i = 2; i < x; i++) {
        if (x % i == 0) {
          System.out.print(" + " + i);
        }
      }
      System.out.println();
    } else {
      System.out.println(x + " is not a perfect number");
    }
  }
}
```



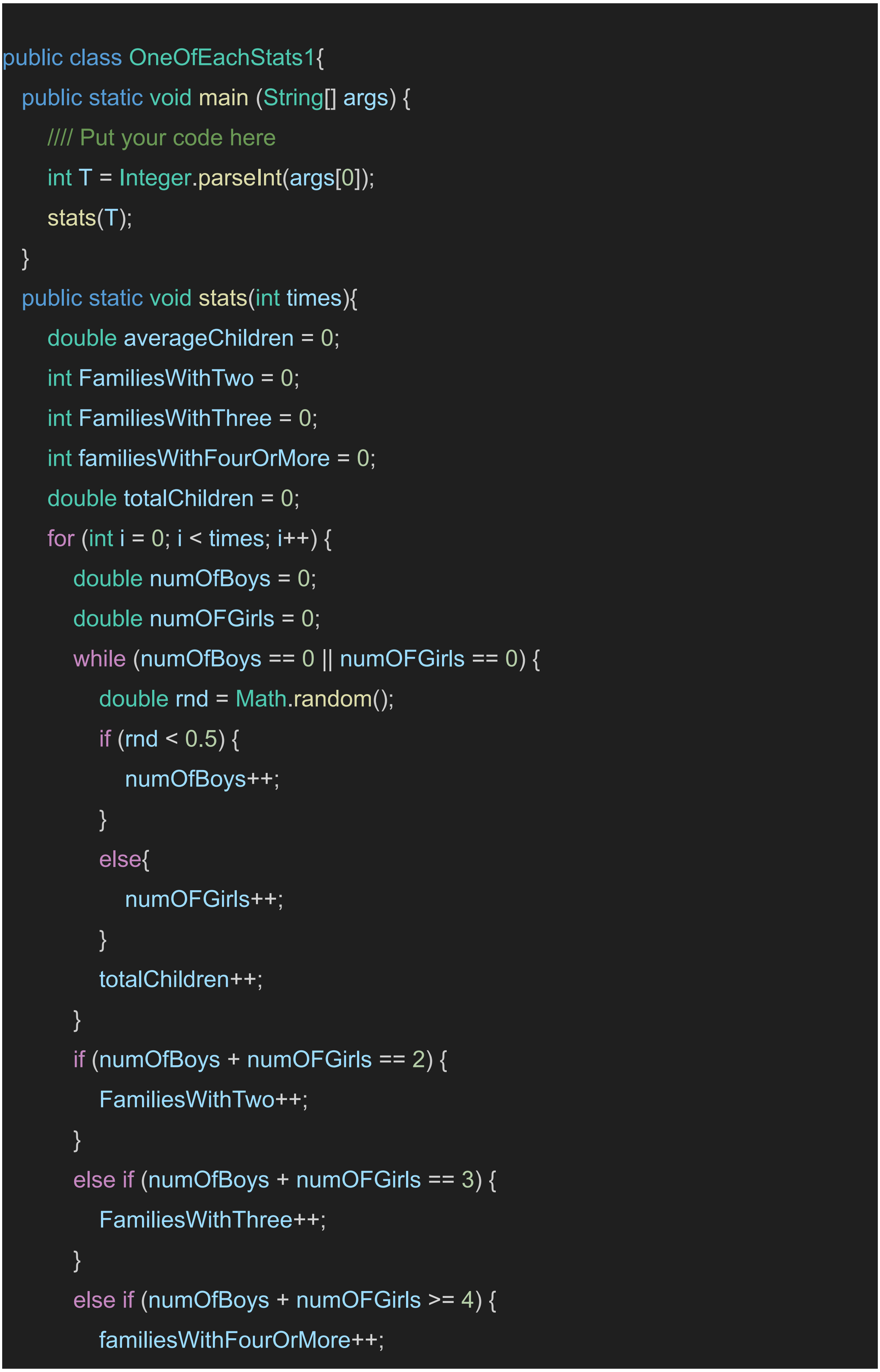
```java
/**
*  Gets a command-line argument n (int), and prints an n-by-n damka board.
*/
/**
*  Gets a command-line argument n (int), and prints an n-by-n damka board.
*/

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

```
public class OneOfEach {
  public static void main (String[] args) {
    //// Put your code here
    oneOfEach();
  }
  public static void oneOfEach() {
    String children = "";
    int numOfBoys = 0;
    int numOFGirls = 0;
    while (numOfBoys == 0 || numOFGirls == 0) {
      double f = Math.random();
      if (f < 0.5) {
        children += "b";
        numOfBoys++;
      }
      else{
        children += "g";
        numOFGirls++;
      }
      children += " ";
    }
    System.out.println(children);
    System.out.println("You made it. . . and you now have " +
numOFGirls+numOfBoys + " 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]);
        // Initailizes a random numbers generator with the given seed value
        Random generator = new Random(seed);
        stats(T, generator);



    }
    public static void stats(int times, Random seed){
        double averageChildren = 0;
        int FamiliesWithTwo = 0;
        int FamiliesWithThree = 0;
        int familiesWithFourOrMore = 0;
        double totalChildren = 0;
        for (int i = 0; i < times; i++) {
            double numOfBoys = 0;
            double numOFGirls = 0;
            while (numOfBoys == 0 || numOFGirls == 0) {
                double rnd = seed.nextDouble();
                if (rnd < 0.5) {
                    numOfBoys++;
                }
                else{
                    numOFGirls++;
                }
                totalChildren++;
            }
```

```java
      if (numOfBoys + numOFGirls == 2) {
        FamiliesWithTwo++;
      }
      else if (numOfBoys + numOFGirls == 3) {
        FamiliesWithThree++;
      }
      else if (numOfBoys + numOFGirls >= 4) {
        familiesWithFourOrMore++;
      }
    }
    averageChildren = totalChildren / times;
    String mostCommonAmountOfChildren = "The most common number of
children is ";
    if (FamiliesWithTwo > FamiliesWithThree && FamiliesWithTwo >
familiesWithFourOrMore) {
      mostCommonAmountOfChildren += 2 + ".";
    }
    else if (FamiliesWithThree > FamiliesWithTwo && FamiliesWithThree >
familiesWithFourOrMore) {
      mostCommonAmountOfChildren += 3 + ".";
    }
    else if (familiesWithFourOrMore > FamiliesWithTwo && familiesWithFourOrMore
> FamiliesWithThree) {
      mostCommonAmountOfChildren += 4 + " or more.";
    }
    System.out.println("Average: " + averageChildren + " children to get at least one
of each gender.");
    System.out.println("Number of families with 2 children: " + FamiliesWithTwo);
    System.out.println("Number of families with 3 children: " + FamiliesWithThree);
    System.out.println("Number of families with 4 or more children: " +
familiesWithFourOrMore);
    System.out.println(mostCommonAmountOfChildren);
  }
}
```



```
public class OneOfEachStats1{
  public static void main (String[] args) {
    //// Put your code here
    int T = Integer.parseInt(args[0]);
    stats(T);
  }
  public static void stats(int times){
    double averageChildren = 0;
    int FamiliesWithTwo = 0;
    int FamiliesWithThree = 0;
    int familiesWithFourOrMore = 0;
    double totalChildren = 0;
    for (int i = 0; i < times; i++) {
      double numOfBoys = 0;
      double numOFGirls = 0;
      while (numOfBoys == 0 || numOFGirls == 0) {
        double rnd = Math.random();
        if (rnd < 0.5) {
          numOfBoys++;
        }
        else{
          numOFGirls++;
        }
        totalChildren++;
      }
      if (numOfBoys + numOFGirls == 2) {
        FamiliesWithTwo++;
      }
      else if (numOfBoys + numOFGirls == 3) {
        FamiliesWithThree++;
      }
      else if (numOfBoys + numOFGirls >= 4) {
        familiesWithFourOrMore++;
```

```
            }
        }
        averageChildren = totalChildren / times;
        String mostCommonAmountOfChildren = "The most common number of
children is ";
        if (FamiliesWithTwo > FamiliesWithThree && FamiliesWithTwo >
familiesWithFourOrMore) {
            mostCommonAmountOfChildren += 2 + ".";
        }
        else if (FamiliesWithThree > FamiliesWithTwo && FamiliesWithThree >
familiesWithFourOrMore) {
            mostCommonAmountOfChildren += 3 + ".";
        }
        else if (familiesWithFourOrMore > FamiliesWithTwo && familiesWithFourOrMore
> FamiliesWithThree) {
            mostCommonAmountOfChildren += 4 + " or more.";
        }
        System.out.println("Average: " + averageChildren + " children to get at least one
of each gender.");
        System.out.println("Number of families with 2 children: " + FamiliesWithTwo);
        System.out.println("Number of families with 3 children: " + FamiliesWithThree);
        System.out.println("Number of families with 4 or more children: " +
familiesWithFourOrMore);
        System.out.println(mostCommonAmountOfChildren);
    }
}
```