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

	int chosenNumber = Integer.parseInt(args[0]);
	int count = 1;

	while (count <= chosenNumber)
	{
		int modMod = chosenNumber%count;

		if (modMod==0)
		{
			System.out.println(count);
		}
		count = count + 1;
	}

	}
}
```

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

		String chosenWord = (args[0]); //romi
		String reveredWord = "";

		for (int i = chosenWord.length()-1; i>=0; i--) //i=1
		{
			reveredWord = reveredWord + chosenWord.charAt(i); //imor
		}

		System.out.println(reveredWord);


		if (((chosenWord.length())%2) == 0 ) //4%2==0
		{
			System.out.println("The middle character is " +
(chosenWord.charAt((chosenWord.length()/2)-1)));
		}
		else
		{
			System.out.println("The middle character is " +
(chosenWord.charAt((chosenWord.length())/2)));
		 }
	}
}
```

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

		int random = (int) (Math.random()*10);
		int currentBiggest = (int)(Math.random()*10);


		String toBePrinted = Integer.toString(random);

		if (currentBiggest < random) {
			System.out.println(random);

		}
		else
			{
			toBePrinted = toBePrinted + " " + currentBiggest;
			random = (int)(Math.random()*10);

			while (random>=currentBiggest){
			 toBePrinted = toBePrinted + " " + random;
			 currentBiggest = random;
			 random = (int)(Math.random()*10);

			}

			System.out.println(toBePrinted);

		}

	}
}
```

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

		int isPerfect = Integer.parseInt(args[0]);
		int sumOfDevisions = 0;
		String toBePrinted = "";
		String finelPrint = "";

		for (int i = 1; i<isPerfect; i++)
		{
		if (isPerfect%i==0)
		{
			sumOfDevisions = sumOfDevisions + i;
			toBePrinted = toBePrinted + (i) + " + ";
		}
		}
		int length = toBePrinted.length();
		if (toBePrinted.charAt(length-2) == 43){
			finelPrint = toBePrinted.substring(0,length-2);
		}

			if (isPerfect==sumOfDevisions)
			{

System.out.println( isPerfect + " is a perfect number since " + isPerfect + " = " + finelPrint );

			}
			else
			{
			System.out.println( isPerfect + " is not a perfect number");
			}
	}
}
```

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

		int boardSize = Integer.parseInt(args[0]);
		for (int i=1; i<=boardSize; i++)
		{
			for(int j=1; j<=boardSize; j++)
			{
				if (i%2==0)
				{
					System.out.print(" *");
				}
				else
				{
					System.out.print("* ");
				}
			}
			System.out.println();
		}
	}
}
```

```
import java.util.Random;

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


   int numberOfExperiments = Integer.parseInt(args[0]);
   int seed = Integer.parseInt(args[1]);
   Random generator = new Random(seed);

   int i=1;
   String toBePrinted = "";
                int numberOfChildren = 0;
        int fourOrMore = 0;
        int twoChildren = 0;
        int threeChildren = 0;
        String mostCommon ="";
        double total = 0;


         while (i<=numberOfExperiments)
   {
      numberOfChildren = 0;
      double randomBoyOrGirl = generator.nextDouble();
      boolean isGirl = (randomBoyOrGirl>=0.5);

      if (isGirl)
      {

         numberOfChildren = numberOfChildren +1;

         while (isGirl)
         {
         randomBoyOrGirl = generator.nextDouble();
         isGirl=(randomBoyOrGirl>=0.5);
         numberOfChildren = numberOfChildren +1;
         }

      }

      else
      {
```

```
      numberOfChildren = numberOfChildren+1;

      while (!isGirl)
      {
      randomBoyOrGirl = generator.nextDouble();
      isGirl=(randomBoyOrGirl>=0.5);
      numberOfChildren = numberOfChildren + 1;
      }
    }
    total = total+numberOfChildren;

    if(numberOfChildren>=4)
      {
      fourOrMore++;
      }
    else if (numberOfChildren==3)
      {
      threeChildren++; //3
      }
    else if (numberOfChildren==2)
      {
      twoChildren++;
      }

    i++;
}



                if(fourOrMore>threeChildren && fourOrMore>twoChildren)
                {
                        mostCommon= "4 or more" ;
                }
                else if(threeChildren>fourOrMore && threeChildren>twoChildren)
                {
                        mostCommon="3";
                }
                else if(twoChildren>fourOrMore && twoChildren>threeChildren)
                {
                       mostCommon="2";
                }


        double averageNumber = total/numberOfExperiments;
```

```
System.out.println("Average: " + averageNumber + " children to get at least one of each gender.");
        System.out.println("Number of families with 2 children: " + twoChildren);
        System.out.println("Number of families with 3 children: " + threeChildren );
        System.out.println("Number of families with 4 or more children: "+ fourOrMore );
        System.out.println("The most common number of children is " + mostCommon+".");

        }
}
```