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

}
}
```

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

}
}
```

```
public class InOrder {
public static void main (String[] args) {
int max=0;
```

```
int random = (int) (Math.random() * 9 +1);
while (random > max )
{
        if (max < random)
        {
                System.out.print(random+" ");
                max=random;
        }
  random = (int) (Math.random() *9 +1);
}
}
}
```

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

```
 int n = Integer.parseInt(args[0]);
boolean div=false;
int sum=1;
int length=0;
int n2=0;
String s1 = n + " is a perfect number since " + n + " = 1";
for (int i=2; i<n; i++)
{
        div = (n%i==0);
        if (div)
        {
          s1 = s1 + " + " + String.valueOf(i);
          sum = sum+i;
        }
}
if (sum==n)
                System.out.print(s1);
else
                System.out.print(n + " is not a perfect number");


}
}
```

```
public class DamkaBoard {
public static void main(String[] args) {
int a= Integer.parseInt(args[0]);
for (int i=1; i<=a; i++)
  {
        for (int z=0; z<a; z++)
        {
```

```
                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 t= Integer.parseInt(args[0]);
int seed = Integer.parseInt(args[1]);
Random generator = new Random(seed);
 int n4=0, n2=0,n3=0, sum=0,kids=0;
 boolean ifboy=false;
 boolean ifgirl=false;
 double rnd;
```

```
for( int i=0; i<t; i++)
{
        while ((ifboy==false)||(ifgirl==false))
{
        rnd = generator.nextDouble();
        if (rnd<0.5)
        {
                ifboy=true;
        }
        else
        {
                ifgirl=true;
        }

        sum++;
        kids++;
}

if (kids==2)
{
        n2++;
}
else
{
        if (kids==3)
        {
                n3++;
        }
        else
        {
                n4++;
        }
}
ifboy=false;
ifgirl=false;
kids=0;

}
System.out.println("Average: "+((double)sum/t)+" children to get at least one of each
gender.");
System.out.println("Number of families with 2 children: "+n2);
System.out.println("Number of families with 3 children: "+n3);
System.out.println("Number of families with 4 or more children: "+n4);
if(n2>n3)
{
```

```
        System.out.println("The most common number of children is 2.");
 }
 else
 {
        if(n4>n3)
        {
                System.out.println("The most common number of children is 4 or more.");
        }
        else
                System.out.println("The most common number of children is 3.");

 }

        }
}
```