DamkaBoard :

```
public class DamkaBoard
}
public static void main(String[] args)
}
;int x=Integer.parseInt(args[0])

if (x<=0)
;System.out.println("Please insert a number that is larger than 0")

for (int i=0; i<x; i++)
       }
for (int n=0; n<x; n++)
if (i%2==0)
;(" *")System.out.print
else
;("* ")System.out.print
;("")System.out.println

               {



{
{
```

OneOfEach

```
public class OneOfEach

}

public static void main (String[] args)

}

;int count=0

;boolean t=false

;boolean s=false


while(t==false||s==false)

}

if (Math.random()>=.5)

}

;System.out.print("b ")

;++count

;t=true

{

else

}

;System.out.print("g ")

;++count

;s=true

{

{


;("")System.out.println

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

{

{
```

OneofEachStats

```
;import java.util.Random
**/
Computes some statistics about families in which the parents decide   *
.to have children until they have at least one child of each gender   *
The program expects to get two command-line arguments: an int value   *
that determines how many families to simulate, and an int value       *
.that serves as the seed of the random numbers generated by the program   *
Example usage: % java OneOfEachStats 1000 1   *
/*
public class OneOfEachStats
}
public static void main (String[] args)
}
Gets the two command-line arguments //
;int T1=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)


;int countn=0
;int num2c=0
;int num3c=0
;int num4plusc=0
;boolean t=false
;boolean s=false
;double total=0
```

```
for (int i=0; i<T1; i++)
}
;countn=0
;t=false
;s=false

while(t==false||s==false)
}
;()double rnd=generator.nextDouble
if(rnd>=.5)
}
;++countn
;t=true
{
else
}
;++countn
;s=true
           {
{
if (countn==2)
;++num2c
else
}
if (countn==3)
;++num3c
else
;++num4plusc
```

```
{
        ;total=total+countn

{



;double avg= (double)(total/T1)
System.out.println("Average: " + avg + " children to get at least one of each
;gender.")

        ;System.out.println("Number of families with 2 children: " + num2c)
        ;System.out.println("Number of families with 3 children: " + num3c)
;System.out.println("Number of families with 4 or more children: " + num4plusc)

if(num2c>num3c&&num2c>num4plusc)
;System.out.println("The most common number of children is 2.")
if (num3c>num4plusc&&num3c>num2c)
;System.out.println("The most common number of children is 3. ")
if(num4plusc>num2c&&num4plusc>num3c)
System.out.println("The most common number of children is 4 of more.
;")
if (num2c==num3c&&num2c==num4plusc&&num3c==num4plusc)
;System.out.println("The most common number of children is 2. ")
if(num3c==num4plusc&&num3c!=num2c&&num3c>num2c)
;System.out.println("The most common number of children is 3. ")
if(num2c==num3c&&num2c!=num4plusc&&num2c>num4plusc)
;System.out.println("The most common number of children is 2. ")
if(num2c==num4plusc&&num2c!=num3c&&num2c>num3c)
;System.out.println("The most common number of children is 2. ")
```

Ordered

```
public class Ordered

}

public static void main (String[] args)

}

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

;int y=Integer.parseInt(args[1])

;int z=Integer.parseInt(args[2])


if ((x>y && y>z)| | (x<y && y<z))

;System.out.println("true")

else

;System.out.println("false")


{

{
```

Perfect

```
public class Perfect
}
public static void main (String[] args)
}
;int x=Integer.parseInt(args[0])
;int sum=0
;"String div="1

if(x<=1)
;System.out.println("Please insert a number that is larger than 1")

for (int i=1; i<=(int)(x/2); i++)
}
if (x%i==0)
}
;sum=sum+i
if (i!=1)
;div=div+ " + " + i
{
{
if (sum==x)
;System.out.println(x + " is a perfect number since " + x + " = " + div)
else
;System.out.println(x + " is not a perfect number")

{
{
```

Reverse

```
public class Reverse
}
public static void main (String[] args)
}
;[0]String s=args
;()int num=s.length
;""=String snew
if(num==1)
}
;System.out.println(s)
;System.out.println("The middle character is " + s)
{
else
}
if(num==0)
;System.out.println("Please insert a word")

else
}
for (int i=num; i>0; i--)
;snew=snew+(s.charAt(i-1))
;System.out.println(snew)
;int middle=num/2
;System.out.println("The middle character is "+s.charAt(middle-1))
{
{
{
{
```