Divisiors.java

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

Reverse.java

```
public class Reverse {
    public static void main (String[] args){
        //String[] array=new char[args[0].length()];
        String s=args[0];
        for(int i=s.length()-1;i>=0;i--)
        {
            System.out.print(s.charAt(i));
        }       //// Put your

        System.out.println();
        int x=s.length();
        if(x%2==0)
        {
            System.out.println("The middle character is "+s.charAt((x/2)-1));
        }

        else
        {
            System.out.println("The middle character is "+s.charAt(x/2));
        }

    }
}
```

InOrder.java

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

    }
}
```

DamkaBoard.java

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

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

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

Perfect.java

```
public class Perfect {
    public static void main (String[] args) {
        int n=Integer.parseInt(args[0]);
        int sum=1;
        String print=n+" is a perfect number since "+n+" = 1";

        for(int i=2;i<n;i++)
        {
            if(n%i==0)
            {
                print+=" + "+i;
                sum+=i;
            }
        }

        if(n!=sum)
        {
            System.out.println(n+" is not a perfect number");
        }
        else
        {
            System.out.println(print);
        }

    }
}
```

OneOfEachStats.java

```
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);
        double average=0.0;
        double children_sum=0.0;
        int family_2=0;
        int family_3=0;
        int family_4_or_more=0;


        for(int i=0;i<T;i++)
        {
            //OneOfEach
            double x;
            int b=0;
            int g=0;
            double children=0.0;

            while(b<1 || g<1)
            {
                children=children+1.0;
                x=generator.nextDouble();
                if(x>=0.5) //x%2==0
                {
```

```
                b++;
            }
            else
            {
                g++;
            }
        }
        children_sum+=children;

        if(children==2)
        {
            family_2++;
        }
        else
        {
            if(children==3)
            {
                family_3++;
            }
            else{
                family_4_or_more++;
            }
        }

    }
    average=children_sum/T;
    System.out.println("Average: "+average+" children to get at least one of each gender.");
    System.out.println("Number of families with 2 children: "+family_2);
    System.out.println("Number of families with 3 children: "+family_3);
    System.out.println("Number of families with 4 or more children: "+family_4_or_more);
```

```
        if(family_2>=family_3 && family_2>=family_4_or_more)
            {
                System.out.println("The most common number of children is 2.");
            }
            else
            {
                if(family_3>=family_2 && family_3>=family_4_or_more)
                {
                    System.out.println("The most common number of children is 3.");
                }
                else
                {
                    System.out.println("The most common number of children is 4 or
more.");
                }
            }

    }
}
```