

```
import java.util.*;

//Recursion

public class RecursionStudy
{
    static void printDescending(int n)
    {
        if(n<1) return;
        System.out.println(n);
        printDescending(n-1);
    }
    public static void main(String[] args)
    {
        int n=5;
        printDescending(n);
    }
}
```

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```
import java.util.*;

public class Fibonacci{
    static int fib(int n)
    {
        if(n<2) return n;
        int a = fib(n-1);
        int b = fib(n-2);
        return a+b;
    }

    public static void main (String[] args){
        int n=4;
        System.out.println(fib(n));
    }
}
```

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```
import java.util.*;
public class BinarySearchWithoutRecursion
{
    public static void main(String[] args)
    {
        int arr[] = {2,5,8,12,16,23,38,56,72};
```

```
int x=23;

int l=0;
int r = arr.length -1;
while (l<r)
{
int mid = (l+r)/2;
int (arr[mid] == x)
{
System.out.println("Value found at index: "+mid);
}
else if(x<arr[mid])
{
r =mid-1;
}
else
{
l=mid+1;
}
System.out.println("value not found");
}
}
```