

```

package Practiseproject;

public class LongIncreasingSequence {

    static int max_ref;

    static int _lis(int arr[], int n) {

        if (n == 1)

            return 1;

        int res, max_ending_here = 1;

        for (int i = 1; i < n; i++) {

            res = _lis(arr, i);

            if (arr[i - 1] < arr[n - 1]

                && res + 1 > max_ending_here)

                max_ending_here = res + 1;

        }

        if (max_ref < max_ending_here)

            max_ref = max_ending_here;

        return max_ending_here; }

    static int lis(int arr[], int n) {

        max_ref = 1;

        _lis(arr, n);

        return max_ref; }

    public static void main(String args[])

    {

        int arr[] = { 10, 22, 9, 33, 21, 50, 41, 60, 80};

        int n = arr.length;

        System.out.println("Length of Long increasing sequence is " + lis(arr,

n)

```

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        + "\n");  
    }  
}
```

output:

Length of Long increasing sequence is 6