

SOURCECODE

```
package com.chandana;

public class LongestSeq {
    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 };
```

```
    int n = arr.length;
```

```
    System.out.println("The Length of longest increasing subsequence is " + lis(arr, n)  
                        + "\n");
```

```
}
```

```
}
```