Longest Increasing Sub-sequence

write a program to find the longest increasing sub-sequence.

Code:

**public** **class** LIS {

**static** **int** lis(**int** arr[])

{

**int** lis[] = **new** **int**[arr.length];

**int** i, j, max = 0;

//Initialize LIS values for all indexes

**for** (i = 0; i < arr.length; i++)

lis[i] = 1;

**for** (i = 1; i < arr.length; i++)

**for** (j = 0; j < i; j++)

**if** (arr[i] > arr[j] && lis[i] < lis[j] + 1){

lis[i] = lis[j] + 1;

}

//Pick maximum of all LIS values

**for** (i = 0; i < arr.length; i++)

**if** (max < lis[i]){

max = lis[i];

}

**return** max;

}

**public** **static** **void** main(String args[]){

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

System.***out***.println("Length of lis is " + *lis*(arr) + "\n");

}

}