Longest Increasing Sub-sequence

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

Writeup:

* Create a temporary array(lis[i]) of length same as that of the array containing random numbers.
* Declare three variables(i,j,max) and initialize max to 0.
* Initialize temporary array(lis[i]) values to 1 for all indexes.
* Using the “for loop” , enter the condition “if(arr[i]>arr[j] && lis[i]< lis[j]+1)” and inside the “if statement” enter “lis[i] = lis[j] +1;”. This condition will give the sub-sequence values stored in temporary array at respective indexes.
* To get the longest increasing sub-sequence, again use the “for loop” with the help of ‘max variable’ (Which is previously initialized as 0) and find the max value.
* Print the max value.