As a developer, write a program to find the longest increasing subsequence.

**class** LongesIncreasingSubsequence {

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

**int** lis[] = **new** **int**[n];

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

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

lis[i] = 1;

**for** (i = 1; i < n; i++)

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

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

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

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

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

max = lis[i];

**return** max;

}

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

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

**int** n = 9;

System.***out***.println(*lis*(arr, n));

}

}

