#include <iostream>

#include <string>

#include <cstring>

using namespace std;

//Switch two arr spots

void swap(string a[], int i, int j){

string temp = a[i];

a[i] = a[j];

a[j] = temp;

}

// return index of max word

int findMaxIndex(string a[], int lastIndex){

int index = 0;

string max = a[index];

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

if (a[i].compare(max) <= 0){

index = i;

max = a[index];

}

}

return index;

}

// sort strings in array in descending ordr

void selectionSort(string a[], int size){

for(int i=size-1; i>=0; i--){

swap( a, i, findMaxIndex(a, i) );

}

}

int main()

{

const int SIZE = 20;

string name[SIZE] =

{"Collins, Bill", "Smith, Bart", "Michalski, Joe", "Griffin, Jim",

"Sanchez, Manny", "Rubin, Sarah", "Taylor, Tyrone", "Johnson, Jill",

"Allison, Jeff", "Moreno, Juan", "Wolfe, Bill", "Whitman, Jean",

"Moretti, Bella", "Wu, Hong", "Patel, Renee", "Harrison, Rose",

"Smith, Cathy", "Conroy, Pat", "Kelly, Sean", "Holland, Beth"};

selectionSort(name, SIZE);

for(int i=SIZE-1; i>=0; i--)

{

cout << name[i] << endl;

}

}