#include <iostream> #include <fstream> using namespace std; bool like(string s1, string s2) { if( s1[0] == '8' or s2[0] == '8' ) return true; if( s1[0] == s2[0] or s1[1] == s2[1]) return true; return false; } void crazyUp(string deck[]) { int dp[52]; /\* Stores length of allowable sequnce starting at current index \*/ for(int i = 0; i < 52; i++) dp[i] = 1; for(int i = 51; i >= 0; i--) { for(int j = i+1; j < 52; j++) { if(like(deck[i], deck[j])) dp[i] = max(dp[i], 1 + dp[j]); } } int beg, end, mx=0; for(int i = 0; i < 52; i++) { if( dp[i] > mx ) { mx = dp[i]; beg = i; } } end = beg; while(dp[end] != 1) { for(int j = end+1; j < 52; j++) { if(like(deck[end], deck[j]) and dp[end] == dp[j]+1) { end = j; break; } } } cout << "Max length of allowable sequence : " << mx << endl; cout << "Sequence begins at : " << deck[beg] << endl; cout << "Sequence ends at: " << deck[end] << endl; } int main() { string fname; cout << "Enter file name:"; cin >> fname; ifstream inp(fname); string deck[52]; for(int i = 0; i < 52; i++) inp >> deck[i]; crazyUp(deck); }

Only 43 lines are visible in the above input. Running with deck of 43 instead of 52 gives the following output.

Enter file name: Ex9.txt Max length of allowable sequence: 20 Sequence begins at: AS Sequence ends at: 7C