#include<stdio.h>

#include<curses.h>

#include<iostream>

#include<fstream>

#include<stdlib.h>

#include<string.h>

#define k 8

using namespace std;

//function to open a file in different mode

void opener(fstream &file, char \*fn, ios\_base::openmode mode)

{

file.open(fn,mode);

if(!file)

{

cout<<"unable to open the file \n";

getch();

exit(1);

}

}

//main program

int main()

{

fstream list[8], outfile;

char name[8][20]={"name0.txt","name1.txt","name2.txt","name3.txt","name4.txt","name5.txt","name6.txt","name7.txt"};

char item[8][20],min[20]="";

int i,count=0;

for(i=0;i<k;i++)

opener(list[i],name[i],ios::in);

opener(outfile,"merge8.txt",ios::out);

for(i=0;i<k;i++)

{

list[i].getline(item[i],20,'\n');

if(list[i].eof())

count++;

}

cout<< "the names after merging using k-way merge algorithm\n";

while(count<k)

{

strcpy(min,"") ;

for(i=0;i<k;i++)

if(!list[i].eof())

{

strcpy(min,item[i]) ;

break;

}

count=0;

for(i=0;i<k;i++)

{

if(list[i].eof())

count++;

else if(strcmp(item[i],min)<0)

strcpy(min,item[i]);

}

if(count==8)break;

outfile<<min<<"\n";

cout<<min<<"\n";

for(i=0;i<k;i++)

if(strcmp(item[i],min)==0)

list[i].getline(item[i],20,'\n');

}

for(i=0;i<8;i++)

list[i].close();

getch();

return 0;

}