#include <iostream>

#include <fstream>

using namespace std;//

struct ver

{

int info;

ver \*link;

ver()

{

info=0;

link=NULL;

}

};

class graph

{

ver \*ed\_form;

public:

graph()

{

ed\_form=NULL;

}

void bucket(int a[],int size,int range)

{

ver \*node;

ver \*vertices;

vertices=new ver[10];

for(int l=0;l<10;l++)

vertices[l].info=l;

for(int j=0;j<size ;j++)

{

int div=a[j]/100;

node=new ver;

node->link=NULL;

node->info=a[j];

ed\_form=&vertices[div];

while(ed\_form->link!=NULL)

{

ed\_form=ed\_form->link;

if(ed\_form->info > node->info)

{

int tem=node->info;

node->info=ed\_form->info;

ed\_form->info=tem;

}

}

ed\_form->link=node;

}

int index=0;

for(int d=0;d<10;d++)

{

ed\_form=&vertices[d];

while(ed\_form->link!=NULL)

{

a[index]=ed\_form->link->info;

index++;

ed\_form=ed\_form->link;

}

}

cout<<endl;

}

};

void main()

{

int a, b;

int \*arr;

graph obj;

ifstream infile;

infile.open("in.txt");

a=8;

cout<<"enter the max range :";

b=3;

arr =new int[a];

for(int i=0;i<a;i++)

{

infile>>arr[i];

}

obj.bucket(arr,a,b);

for(int j=0;j<a;j++)

{

cout<<arr[j]<<" ";

}

system("pause");

}