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#include<iostream>
#include<fstream>
#include<stdlib.h>
#include<vector>
#include<bits/stdc++.h>
using namespace std;

class Goodies
{
public:
string name_of_item;
int price_of_item;
int stringTointeger(string str)
{
    int temp = 0;
    for (int i = 0; i < str.length(); i++)
    {
        temp = temp * 10 + (str[i] - '0');
    }
    return temp;
}
string substring(string ip, int startpos, int length)
{
    string str;
    for(int i = 0; i<length; i++)
    {
        str[i] = ip[ i + startpos];
    }
    return str;
}
};

int main()
{
    string input, number;
    vector<Goodies> vg;
    ifstream ip_file;
    Goodies g;
    ip_file.open("sample_input.txt");
    if(!ip_file.is_open())
    {
        cout<<"Error in opening file"<<endl;
    }
    else
    {
        while (!ip_file.eof())
        {
            getline(ip_file,input);
            for(int i = 0; i<input.size(); i++)
            {
                if(input[i] == ':')
                {
                    g.name_of_item = input.substr(0, i);
                    number = input.substr(i+2, input.size()-i-2);
                    g.price_of_item = g.stringTointeger(number);
                    break;
                }
            }
            vg.push_back(g);
        }
    }
    ip_file.close();
    int min_ind =0;
    Goodies temp;
    for(int i =0 ; i<vg.size()-1; i++) //Sorting
    {
        min_ind = i;
    }
}

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for(int j = i+1; j<vg.size(); j++)
{
    if(vg[j].price_of_item<vg[min_ind].price_of_item)
    {
        min_ind = j;
    }
}
temp = vg[i];
vg[i] = vg[min_ind];
vg[min_ind] = temp;
}

//Find minimum:
cout<<"Enter number of employees:"<<endl;
int no_of_emp = 0;
cin>>no_of_emp;
int temp2 = vg[3].price_of_item - vg[0].price_of_item;
int min2 = 0;
for(int i = 1; i<=vg.size()-no_of_emp; i++)
{
    if(temp2 > vg[i + no_of_emp - 1].price_of_item - vg[i].price_of_item)
    {
        temp2 = vg[i + no_of_emp - 1].price_of_item - vg[i].price_of_item;
        min2 = i;
    }
}
ofstream file_out("sample_out.txt", ios::out);
file_out<<"Here are the goodies which are selected for the distribution."<<endl;
cout<<"Here are the goodies which are selected for the distribution."<<endl;
for(int i = 0; i<no_of_emp; i++)
{
    file_out<<vg[i+min2].name_of_item<<" : "<<vg[i+min2].price_of_item<<endl;
    cout<<vg[i+min2].name_of_item<<" : "<<vg[i+min2].price_of_item<<endl;
}
cout<<"And the difference between the chosen goods with the highest price and lowest price is: "<<temp2<<endl;
file_out<<"And the difference between the chosen goods with the highest price and lowest price is: "<<temp2<<endl;
file_out.close();
return 0;
}

```