#include<stdio.h>

#include<string.h>

#include<stdlib.h>

#include<stdbool.h>

struct team {

char name[10];

int points,goalDifference;

};

typedef struct team UEFA;

int main () {

int t;

scanf("%d",&t);

while (t--) {

char home\_team[10],away\_team[10];

int i,j,home\_goal,away\_goal;

UEFA teams[4],temp;

bool homeTeam\_found , awayTeam\_found;

for(i=0;i<4;i++) {

teams[i].name[0] = '#';

teams[i].points = 0;

teams[i].goalDifference =0;

}

for(i=0;i<12;i++) {

scanf("%s %d vs. %d%s",home\_team,&home\_goal,&away\_goal,away\_team);

j=0;

homeTeam\_found = false;

awayTeam\_found = false;

while (j<4) {

if (!homeTeam\_found && (teams[j].name[0]=='#' || !

strcmp(teams[j].name , home\_team))) {

strcpy(teams[j].name , home\_team);

if (home\_goal > away\_goal) {

teams[j].points += 3;

}

else if (home\_goal == away\_goal) {

teams[j].points += 1;

}

teams[j].goalDifference += (home\_goal - away\_goal);

homeTeam\_found = true;

j++;

}

if (!awayTeam\_found && (teams[j].name[0]=='#' || !

strcmp(teams[j].name , away\_team))) {

strcpy(teams[j].name , away\_team);

if (away\_goal > home\_goal) {

teams[j].points +=3;

}

else if (home\_goal == away\_goal) {

teams[j].points +=1;

}

teams[j].goalDifference += (away\_goal - home\_goal);

awayTeam\_found = true;

}

if(homeTeam\_found && awayTeam\_found) {

break;

}

j++;

}

}

for(i=0;i<2;i++) {

for(j=i+1;j<4;j++) {

if ((teams[j].points > teams[i].points) || ((teams[j].points ==

teams[i].points) && (teams[j].goalDifference > teams[i].goalDifference))) {

temp = teams[i];

teams[i] = teams[j];

teams[j]= temp;

}

}

}

printf("%s %s\n",teams[0].name , teams[1].name);

}

return 0;}