#include<stdio.h>

#include<string.h>

struct date

{

int date\_day;

int date\_month;

int date\_year;

};

struct emp

{

char emp\_name[100];

int emp\_age;

char emp\_pos[100];

struct date join\_date;

};

void swap(struct emp\* ele1,struct emp\* ele2)

{

struct emp temp;

temp = \*ele1;

\*ele1 = \*ele2;

\*ele2 = temp;

}

int compare\_date(struct date date1,struct date date2)

{

int day1 = date1.date\_day;

int month1 = date1.date\_month;

int year1 = date1.date\_year;

int day2 = date2.date\_day;

int month2 = date2.date\_month;

int year2 = date2.date\_year;

if(year1 > year2)

{

return 1;

}

else if (month1 > month2)

{

return 1;

}

else if (day1 > day2)

{

return 1;

}

else

{

return -1;

}

}

void sort\_name(struct emp array[100],int n)

{

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

{

for(int j = i; j < n-1; j++)

{

if ((strcmp(array[i].emp\_name,array[i+1].emp\_name)) > 0)

{

swap(&array[i],&array[i+1]);

}

}

}

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

{

printf("%s",array[i].emp\_name);

printf("%d",array[i].emp\_age);

printf("\n%s",array[i].emp\_pos);

printf("%d/%d/%d\n",array[i].join\_date.date\_day,array[i].join\_date.date\_month,array[i].join\_date.date\_year);

printf("\n");

}

}

void sort\_date(struct emp array[100],int n)

{

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

{

for(int j = i; j < n-1; j++)

{

if (compare\_date(array[i].join\_date,array[i+1].join\_date) == 1)

{

swap(&array[i],&array[i+1]);

}

}

}

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

{

printf("%s",array[i].emp\_name);

}

}

int main()

{

int num\_emp = 0;

char name[100];

int age = 0;

char pos[100];

int day = 0;

int month = 0;

int year = 0;

struct date date\_of\_joining;

char rand;

struct emp emp\_array[100];

scanf("%d\n",&num\_emp);

for(int i = 0; i < num\_emp; i++)

{

fgets(name,100,stdin);

scanf("\n%d\n",&age);

fgets(pos,100,stdin);

scanf("\n%d/%d/%d%c",&day,&month,&year,&rand);

date\_of\_joining.date\_day = day;

date\_of\_joining.date\_month = month;

date\_of\_joining.date\_year = year;

strcpy(emp\_array[i].emp\_name,name);

emp\_array[i].emp\_age = age;

strcpy(emp\_array[i].emp\_pos,pos);

emp\_array[i].join\_date = date\_of\_joining;

}

printf("\nOUTPUT\n");

sort\_name(emp\_array,num\_emp);

sort\_date(emp\_array,num\_emp);

}