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#include <stdio.h>
#include <string.h>
#define N 3

struct census
{
    char name[10];
    long int popltn;
    float lit;
}city[N];

void input(void);
void sort_n(void);
void sort_l(void);
void sort_p(void);
void ouput(struct census,struct census,struct census);
main()
{
    struct census s1 [N],s2[N],s3[N];
    printf("enter the value of %d cities:\nfirst cityname,second population,third literacy level\n",N);
    input();
    sort_n();
    s1[N]=city[N];
    sort_l();
    s2[N]=city[N];
    sort_p();
    s3[N]=city[N];
    ouput(s1 [N], s2[N],s3[N]);
}
void input(void)
{
    int i;
    for(i=0;i<N;i++)
        scanf("%s %ld %f",
            city[i].name,
            &city[i].popltn,
            &city[i].lit);
    printf("reading is done\n");
}

void sort_n(void)
{
    struct census temp;

```

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int i,j;
for(i=1;i<=N-1;i++)
for(j=1;j<=N-i;j++)
{
    if(strcmp(city[j-1].name,city[j].name)>0)
    {
        temp=city[j-1];
        city[j-1]=city[j];
        city[j]=temp;
    }
}
}

```

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void sort_l(void)
{
    int i,j;
    struct census temp;
    for(i=1;j<=N-1;i++)
    for(j=1;j<=N-i;j++)
    {
        if(city[j-1].lit>city[j].lit)
        {
            temp=city[j-1];
            city[j-1]=city[j];
            city[j]=temp;
        }
    }
}

```

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void sort_p(void)
{
    int i,j;
    struct census temp;
    for(i=1;i<=N-1;i++)
    for(j=1;j<=N-i;j++)
    {
        if(city[j-1].popltn>city[j].popltn)
        {
            temp=city[j-1];
            city[j-1]=city[j];
            city[j]=temp;
        }
    }
}

```

```

void output(struct census p[N],struct census q[N],
struct census s[N])
{
    int i,j;
    for(i=0;i<N;i++)
    {
        for(j=1;j<4;j++)
        {
            if(j==1)
            {
                printf("sorting by there names:\n");
                printf("%s\t%d\t%f\n",
                    p[i].name,
                    p[i].popltn,
                    p[i].lit);
            }
            else if(j==2)
            {
                printf("soring by there literacy level:\n");
                printf("%s\t%d\t%f\n",
                    q[i].name,
                    q[i].popltn,
                    q[i].lit);
            }
            else if(j==3)
            { printf("sorting by there population:\n");
                printf("%s\t%d\t%f\n",
                    s[i].name,
                    s[i].popltn,
                    s[i].lit);
            }
        }
    }
}
}
}

```