

```
#include <stdio.h>

#include <conio.h>

#include <string.h>

#include <stdlib.h>

struct ogrenci1{

    char ad[20][20];

    char soyad[20][20];

    char ogrno[15][15];

    char telno[15][15];

    char mail[20][20];

}a;
```

```
struct ogrenci2{

    char ad[20][20];

    char soyad[20][20];

    char ogrno[15][15];

    char telno[15][15];

    char mail[20][20];

}b;
```

```
struct ogrenci3{

    char ad[20];

    char soyad[20];

    char ogrno[15];

    char telno[15];

    char mail[20];

}c;
```

```
void kullaniciekle();
```

```
void telefonubul();
```

```
void ogrnobul();
```

```
void mailbul();
```

```
void isimsirala();
```

```
void ogrnosirala();
```

```
void main()
```

```
{
```

```
    int secim;
```

```
        int sir;
```

```
    printf("1 -> Kullanici ekle \n2 -> Kullanici bul \n3 -> Sirala \n4 -> Cikis \n ");
```

```
    printf("Lutfen seciminizi yapiniz: ");
```

```
    scanf("%d", &secim);
```

```
    switch (secim) {
```

```
        case 1: kullaniciekle();
```

```
        main();
```

```
            break;
```

```
        case 2:
```

```
            printf("1 -> Telefon numarasina gore bul \n 2 -> Ogrenci numarasina gore bul \n 3 ->  
Mail adresine gore bul \n 4 -> Bir ust menuye don \n ");
```

```
            int secim2;
```

```
            scanf("%d",&secim2);
```

```
            switch (secim2)
```

```
            {
```

```
                case 1:telefonubul();
```

```
                main();
```

```
        break;
        case 2:ogrnobul();
main();
        break;
        case 3:mailbul();
main();
        break;
        case 4: main();
        break;

}
```

```
        break;
case 3:
```

```
printf("1 -> Isme gore sirala \n 2 -> Ogrenci numarasina gore sirala \n 3 -> Bir ust
menuye don \n ");
scanf("%d",&sira);
    if (sira==1){
        isimsirala();
    }
else if (sira==2){
    ogrnosirala();
}
else if (sira==3){
    main();
}
}
```

```
        break;
    case 4: exit(EXIT_SUCCESS);
        break;

}
```

```
}
```

```
void kullaniciEkle() {
    FILE * dosya;

    dosya = fopen("student.txt", "w+");

    if (dosya == NULL){
        printf("Aradiginiz dosya bulunamadi .\n");
    }

    else
    {

        printf("Ogrencinin bilgilerini giriniz\n");
        printf("Adi:");
        scanf(" %s", b.ad);
        printf("Soyadi:");
        scanf(" %s", b.soyad);
        printf("Ogrenci No:");
        scanf("%s", b.ogrno);
        printf("Telefon no:");
        scanf("%s", b.telno);
```

```
        printf("Mail:");
        scanf("%s", b.mail);
        fprintf(dosya, "%s\n %s\n %s\n %s\n %s\n", b.ad, b.soyad, b.ogrno, b.telno, b.mail);

    fclose(dosya);
}

    getch();

}
```

```
void telefonubul()
{
    FILE * dosya;

    dosya = fopen("student.txt", "w+");

    char no[30];
    printf("Telefonu Giriniz: ");
    scanf("%s",no);
    if((dosya=fopen("student.txt","r"))==NULL)
    {
        printf("dosya bulunamadi");
    }
    else{
        int tut=0;
```

```

while(!feof(dosya)){
    fscanf(dosya, "%s\t%s\t%s\t%s\t%s", b.ad, b.soyad, b.ogrno, b.telno, b.mail);
    if(strcmp(no, b.telno)==0){

        printf("%s\t%s\t%s\t%s\t%s\n", b.ad, b.soyad, b.ogrno, b.telno, b.mail);
        tut=1;
        break;

    }
}

fclose(dosya);
if(tut==0){

    printf("Ogrenci Bulunamadi");
}
}

}

void ogrnobul()
{
    FILE * dosya;

    dosya = fopen("student.txt", "w+");

    char ogrencino[30];
    printf("Ogrenci Numarasini Giriniz: ");
    scanf("%s",ogrencino);
    if((dosya=fopen("student.txt","r"))==NULL)
    {
        printf("dosya bulunamadi");
    }
}

```

```

else{
int tut2=0;
while(!feof(dosya)){
    fscanf(dosya, "%s\t%s\t%s\t%s", b.ad, b.soyad, b.ogrno, b.telno, b.mail);
    if(strcmp(ogrencino, b.ogrno)==0){

        printf("%s\t%s\t%s\t%s\t%s\n", b.ad, b.soyad, b.ogrno, b.telno, b.mail);
        tut2=1;
        break;

    }
}

    fclose(dosya);
    if(tut2==0){

        printf("Ogrenci Bulunamadi");
    }
}

}

```

```

void mailbul()
{
    FILE * dosya;
    dosya = fopen("student.txt", "w+");

```

```
char mailno[30];
printf("Mail Giriniz: ");
scanf("%s",mailno);
if((dosya=fopen("student.txt","r"))==NULL)
{
    printf("dosya bulunamadi");
}
else{
int tut3=0;
while(!feof(dosya)){
    fscanf(dosya, "%s\t%s\t%s\t%s\t%s", b.ad, b.soyad, b.ogrno, b.telno, b.mail);
    if(strcmp(mailno, b.mail)==0){

        printf("%s\t%s\t%s\t%s\t%s\n", b.ad, b.soyad, b.ogrno, b.telno, b.mail);
        tut3=1;
        break;

    }
}

    fclose(dosya);
    if(tut3==0){

        printf("Ogrenci Bulunamadi");
    }
}

}
```



```

void isimsirala()
{
    FILE * dosya;

    dosya = fopen("student.txt", "w+");

    int k;
    int j;
    int i=0;
    if((dosya=fopen("student.txt", "r"))==NULL)
    {
        printf("dosya bulunamadi");
    }
    else{

        while(!feof(dosya)){
            fscanf(dosya, "%s\t%s\t%s\t%s\t%s", b.ad[i], b.soyad[i], b.ogrno[i], b.telno[i], b.mail[i]);
            i++;
        }
        char tut4[20];

        for(k=0;k<i-1;k++){
            for(j=k+1;j<i;j++){

                if(strcmp(b.ad[k],b.ad[j])>0){

                    strcpy(tut4,b.ad[k]);
                    strcpy(b.ad[k],b.ad[j]);
                    strcpy(b.ad[j],tut4);
                }
            }
        }
    }
}

```

```

        strcpy(tut4,b.soyad[k]);
        strcpy(b.soyad[k],b.soyad[j]);
        strcpy(b.soyad[j],tut4);
        strcpy(tut4,b.ogrno[k]);
        strcpy(b.ogrno[k],b.ogrno[j]);
        strcpy(b.ogrno[j],tut4);
        strcpy(tut4,b.telno[k]);
        strcpy(b.telno[k],b.telno[j]);
        strcpy(b.telno[j],tut4);
        strcpy(tut4,b.mail[k]);
        strcpy(b.mail[k],b.mail[j]);
        strcpy(b.mail[j],tut4);

    }

}

for(j=0;j<i;j++){
    printf("%s\t%s\t%s\t%s\t%s\n", b.ad[j], b.soyad[j], b.ogrno[j], b.telno[j], b.mail[j]);
}

fclose(dosya);

}

}

void ogrnosirala()
{
    FILE * dosya;
    dosya = fopen("student.txt", "w+");

```

```

int i=0;
if((dosya=fopen("student.txt","r"))==NULL)
{
    printf("dosya bulunamadi");
}
else{

while(!feof(dosya)){
    fscanf(dosya, "%s\t%s\t%s\t%s\t%s", b.ad[i], b.soyad[i], b.ogrno[i], b.telno[i], b.mail[i]);
    i++;
}
int j=0;
char tut[15][15];
int k;
for(j=0;j<i;j++){
    for(k=1;k<i-1;k++){
        if(strcmp(b.ogrno[k-1],b.ogrno[k])>0){
            strcpy(tut[j],b.ogrno[k]);
            strcpy(b.ogrno[k],b.ogrno[k-1]);
            strcpy(b.ogrno[k-1],tut[j]);
            strcpy(tut[j],b.ad);
            strcpy(b.ad,b.ad[k-1]);
            strcpy(b.ad[k-1],tut[j]);
            strcpy(tut[j],b.soyad[k]);
            strcpy(b.soyad[k],b.soyad[k-1]);
            strcpy(b.soyad[k-1],tut[j]);
            strcpy(tut[j],b.telno[k]);
            strcpy(b.telno[k],b.telno[k-1]);
            strcpy(b.telno[k-1],tut[j]);
            strcpy(tut[j],b.mail[k]);
            strcpy(b.mail[k],b.mail[k-1]);
        }
    }
}
}

```

```
        strcpy(b.mail[k-1],tut);
    }
}

for(j=0;j<i;j++){
    printf("%s\t%s\t%s\t%s\t%s\n", b.ad[j], b.soyad[j], b.ogrno[j], b.telno[j], b.mail[j]);
}


fclose(dosya);

}

}
```