

Answer on Question #55835-Engineering-Software Engineering

A hospital keeps a file of blood donors in which each record has the format:

Name:

Address:

Age:

Blood Type: (Type 1, 2, 3 or 4)

Write a program to read the file and print a list of all blood donors whose age is below 25 and blood is type 2.

Solution

Program to create record file of blood donors

```
/* This program will make a file of blood donors and save information in it */
```

```
/* Writing program */
```

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
void main() {
```

```
FILE *fp;
```

```
char another='y';
```

```
struct blood {
```

```
    char name[50];
```

```
    char adr[50];
```

```
    int age;
```

```
    int bld;
```

```
    } b;
```

```
clrscr();
```

```
fp=fopen("BLOODBANK.DAT","wb");
```

```
if(fp==NULL) {
```

```
    printf("cannot open target file!\n");
```

```
    exit();
```

```
}
```

```
while(another=='Y' || another=='y') {
```

```

clrscr();

printf("\t\tInformation of Blood donor\n");

printf("\t\t*****\n\n");

printf("Enter the name: ");

scanf("%s",b.name);

printf("\n\nenter the address: ");

scanf("%s",b.adr);

printf("\n\nenter the age: ");

scanf("%d",&b.age);

printf("\n\nenter the blood group(1/2/3/4): ");

scanf("%d",&b.bld);

fprintf(fp,"%s\t%s\t%d\t%d",b.name,b.adr,b.age,b.bld);

printf("\n\nenter more information(Y/N): ");

fflush(stdin);

another=getch();

}

fclose(fp);

}

```

Program to read record file for specifications

```

/* This program will read the information from the file made by writing program */

/* Reading Program */

#include<stdio.h>

#include<conio.h>

void main() {

FILE *fp;

char ch;

struct blood {

    char name[50];

    char adr[50];

```

```
    int age;

    int bld;

    }b;

clrscr();

fp=fopen("BLOODBANK.DAT","rb");

if(fp==NULL) {

printf("cannot open source file!\n\n");

exit();

}

while(fscanf(fp,"%s\t%s\t%d\t%d",&b.name,&b.adr,&b.age,&b.bld)!=EOF)

if(b.age<25 && b.bld==2) {

printf("\n%s\t %s\t%2d\t %d",b.name,b.adr,b.age,b.bld);

}

fclose(fp);

getch();

}
```