

```
Alexs-MacBook-Air:6 alex$ cat enrollee.h
```

```
#ifndef _enrollee_h_
#define _enrollee_h_
```

```
typedef struct {
    char name [50];
    char sex;
    uint32_t school;
    char medal;
    char essay;
    uint32_t exam_1;
    uint32_t exam_2;
    uint32_t exam_3;
} enrollee;
```

```
#endif
```

```
Alexs-MacBook-Air:6 alex$ cat enrollee_dump.c
```

```
#include <stdio.h>
#include <string.h>
#include <errno.h>
#include <stdint.h>
```

```
#include "enrollee.h"
```

```
int readEnrollee(enrollee *e)
```

```
{
    return scanf("%[^\\t]\\t%c\\t%u\\t%c\\t%u\\t%u\\t%u\\t%c\\n", e->name, &e-
>sex, &e->school, &e->medal, &e->exam_1, &e->exam_2, &e->exam_3, &e-
>essay) == 8;
}
```

```
int main(int argc, char* argv[])
```

```
{
    if (argc != 2) {
        perror("No filename");
        return 1;
    }

    enrollee e;
    FILE *out = fopen(argv[1], "w+");
    if (!out) {
        perror("Can't open or create the file");
        return 2;
    }
    while (readEnrollee(&e)) {
        fwrite(&e, sizeof(e), 1, out);
    }

    fseek(out, 0, SEEK_SET);
    while (fread(&e, sizeof(e), 1, out) == 1) {
        printf("%s\\t%c\\t%u\\t%c\\t%u\\t%u\\t%u\\t%c\\n", e.name, e.sex,
e.school, e.medal, e.exam_1, e.exam_2, e.exam_3, e.essay);
    }
}
```

```
return 0;
```

```

}
Alexs-MacBook-Air:6 alex$ cat same_2_marks.c
#include <stdio.h>
#include <stdint.h>
#include <string.h>

#include "enrollee.h"

int main(int argc, char* argv[])
{
    if (argc < 2) {
        perror("Usage: s_2_m [-f] dumb_file [result_file]\n");
        return 1;
    }

    int print = 0;

    if (strcmp(argv[1], "-f") == 0) {
        print = 1;
    }

    enrollee e;
    FILE *in = fopen(argv[1 + print], "r");
    if (!in) {
        perror("Can't open the file");
        printf("%s %d\n", argv[1 + print], print);
        return 2;
    }
    FILE *out = fopen(argv[2 + print], "w");
    if (!in && argv[2 + print]) {
        perror("Can't open the file");
        return 2;
    }
    while (fread(&e, sizeof(e), 1, in) == 1) {
        if (e.sex == 'f') {
            if (e.exam_1 == e.exam_2 || e.exam_2 == e.exam_3 || e.exam_1
== e.exam_3) {
                if (argv[2 + print]) {
                    fprintf(out, "%s\n", e.name);
                }
                if (print) {
                    printf("%s\n", e.name);
                }
            }
        }
    }
    return 0;
}
Alexs-MacBook-Air:6 alex$ gcc -Wall -pedantic -std=c99 -g
enrollee_dump.c -o dump.out
Alexs-MacBook-Air:6 alex$ gcc -Wall -pedantic -std=c99 -g same_2_marks.c
-o s_2_m.out
Alexs-MacBook-Air:6 alex$ cat list.txt
Frank K.B.   f    112 y    99  80  80  y
Freemen K.L  m    814 n    63  63  72  y
Hitrhow A.B. f   1943y   89  87  91  y

```

Povlov M.V	m	773	y	82	76	85	y
Krupin K.K.	m	1274	n	72	76	69	y
Nobosadova E.G.	f	1080	y	100	98	98	y
Freeman B.I.	m	772	n	91	88	80	y
Makarova M.A	f	914	n	73	69	73	y
Kabberbatch N.V.	m	1313	n	76	72	80	y
Kiseleva M.P.	f	771	n	70	70	70	y
Tsapkov A.M	m	771	n	91	80	80	y
Kalita K.V.	f	1166	n	70	83	76	y
Pavlov A.V.	m	228	n	53	60	55	n

Alexs-MacBook-Air:6 alex\$ ./dump.out list.ls < list.txt

Frank K.B.	f	112	y	99	80	80	y
Freemen K.L	m	814	n	63	63	72	y
Hitrhov A.B.	f	1943	y	89	87	91	y
Povlov M.V	m	773	y	82	76	85	y
Krupin K.K.	m	1274	n	72	76	69	y
Nobosadova E.G.	f	1080	y	100	98	98	y
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Makarova M.A	f	914	n	73	69	73	y
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Kiseleva M.P.	f	771	n	70	70	70	y
Tsapkov A.M	m	771	n	91	80	80	y
Kalita K.V.	f	1166	n	70	83	76	y
Pavlov A.V.	m	228	n	53	60	55	n

Alexs-MacBook-Air:6 alex\$ ls

Protocol&Tasks dump.out.dSYM enrollee\_dump.c list.txts\_2\_m.out.dSYM  
 dump.out enrollee.h list.ls s\_2\_m.out same\_2\_marks.c

Alexs-MacBook-Air:6 alex\$ ./s\_2\_m.out -f list.ls out.txt

Frank K.B.

Nobosadova E.G.

Makarova M.A

Kiseleva M.P.

Alexs-MacBook-Air:6 alex\$ cat out.txt

Frank K.B.

Nobosadova E.G.

Makarova M.A

Kiseleva M.P.

Alexs-MacBook-Air:6 alex\$