

September 28, 2017

September 28, 2017 11:28 AM

C++ + D → EAF

```
{  
  try {  
    ...  
  }  
  catch {  
    ...  
  }  
}
```

no in C

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

```
fopen("test.log", " ");
```

r read

w write

a append

r+ , w+ , a+

```
FILE* file = fopen("test.log", "rw+");
```

```
fgetc(file);
```

```
fprintf(file, format, args);
```

```
fgetc(file);
```

```
fscanf(file, format, args);
```

FILE* file = stdout;

{
 fprintf(file, "hello");
 fprintf(stdout, "hello");
 printf("hello");
}

FILE* file = fopen("...", "wt");
fclose(file);

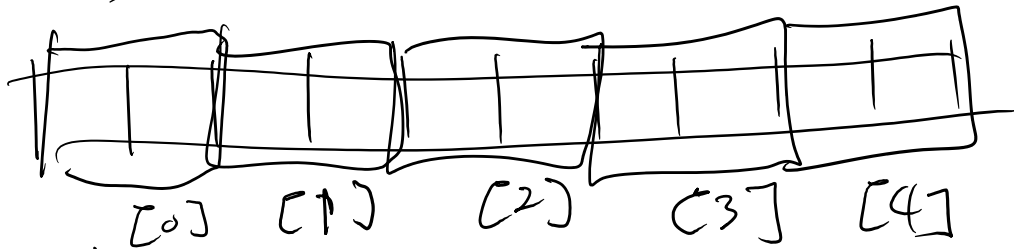
FILE* file = fopen("...", "wt");

if (NULL != file) {
 // succeeded to open file

fclose(file);

```
} else {  
    //failed  
}
```

array



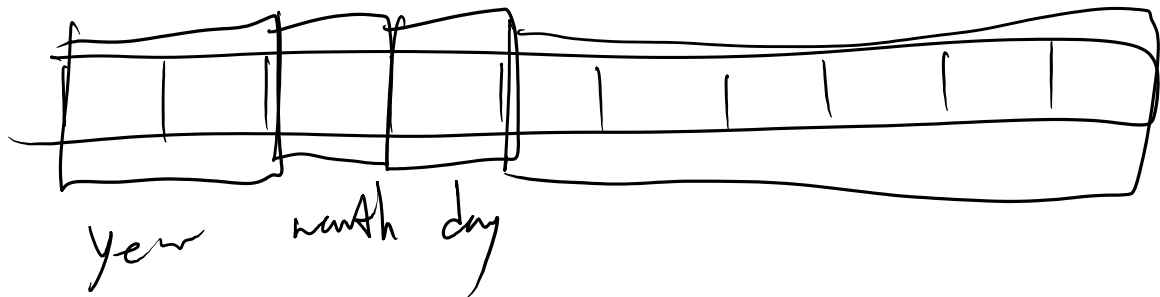
short array[5]

short year

char month

char day

char name[6]



sendGift(char* name, short year ...)

'struct Friend' {

short year;

char month;

char day;

char name[6];

};

int main() ?

struct Friend f;

}

typedef struct Friend friend;

int main() {

Friend f; ✓

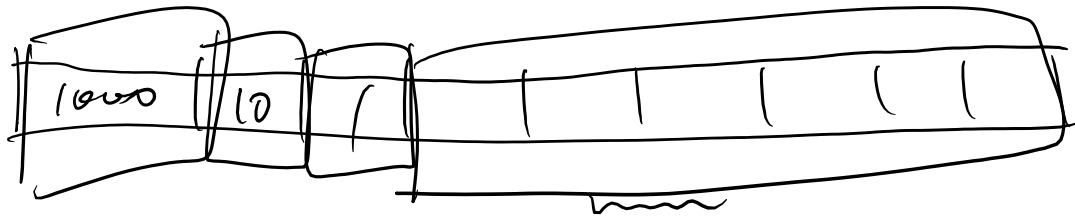
f.year = 1000;

f.month = 10;

f.day = 1;

printf("%d-%d-%d",
f.year, f.month, f.day);





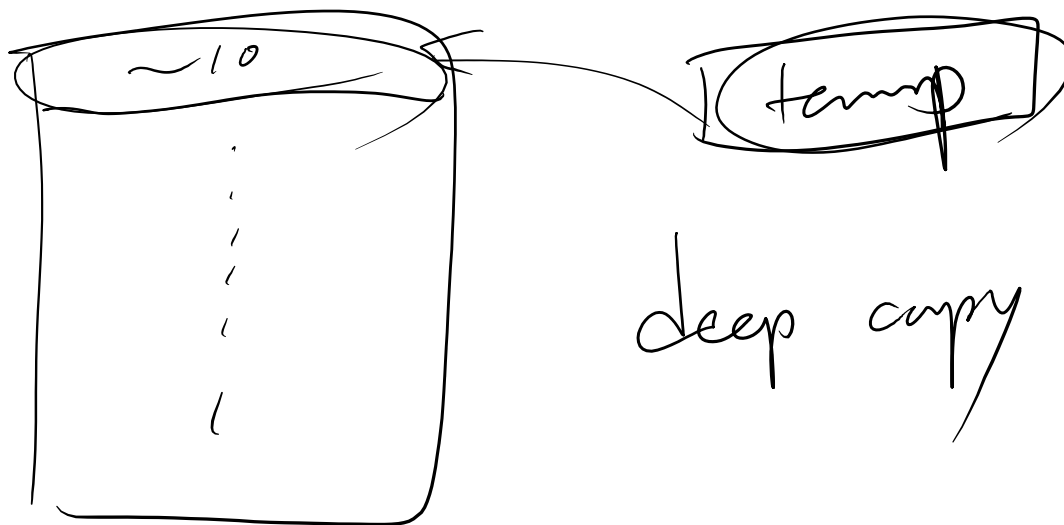
```
scanf ("%d", &f.year);
```

```
int main () {  
    Friend friends[10];  
    friends[0].year
```

```
    Friend temp;
```

```
    //read data to temp
```

```
    friends[0] = temp; //works.
```



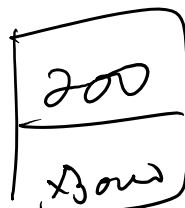
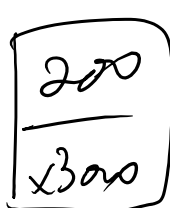
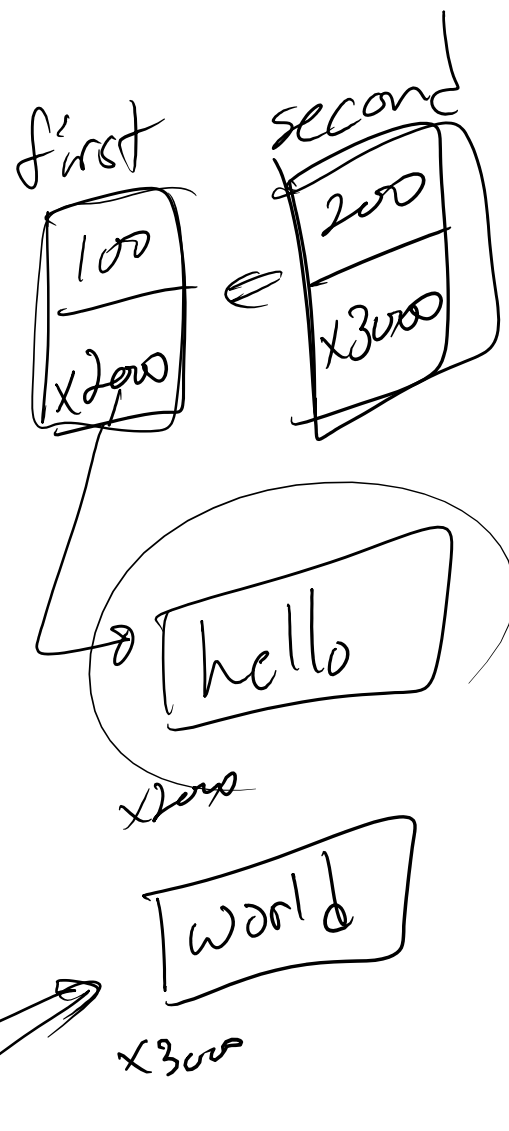
```

struct A {
    int intValue;
    char* ptr;
};
  
```

```

struct A first;
struct A second;

first = second;
  
```



1x5000

1x5000

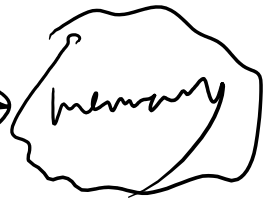
x3000

Friend * pfriend = ?;

pfriend = temp;

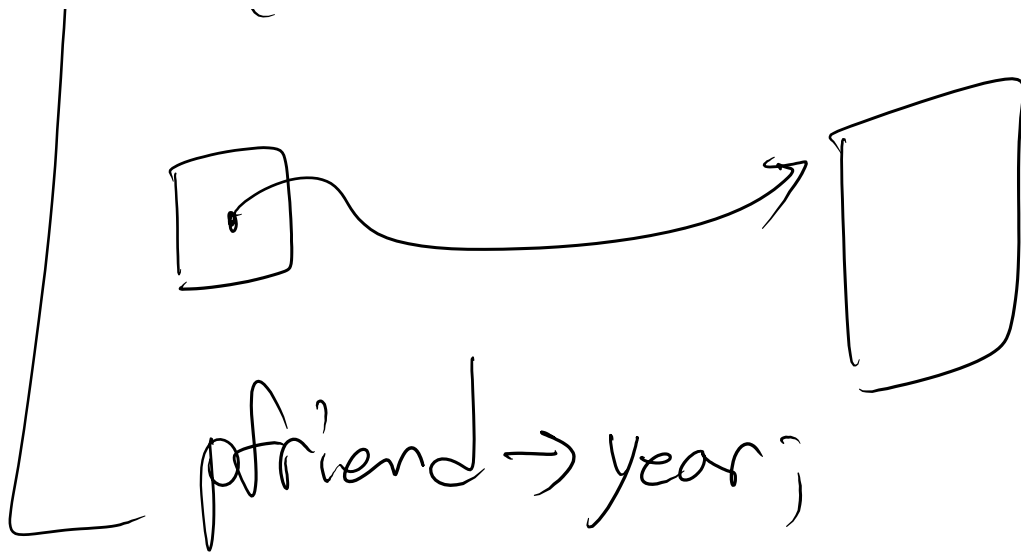
[pfriend] → year = temp → year;

[*pfriend = *temp;
pfriend[0] = temp[0] // my not?



(*pfriend).year ✓

* (pfriend.year) ✗



~~←~~

```
int readFriend ( struct Friend* ) {
```

```
{
```

```
}
```

```
int main() {  
    Friend friend; ←  
}
```

read Friend (&friend);

```
struct Friend readFriend() {  
    Friend f;  
    ...  
    return f;  
}
```

Friend new = readFriend();

~~Friend * readFriend() {
 (Friend f) ← ...~~

~~(friend + 1) <=~~
~~return &f;~~
~~}~~

let's
 talk more
 with
 "Run-time
 Stack"

"malloc"

Friend friends[10];

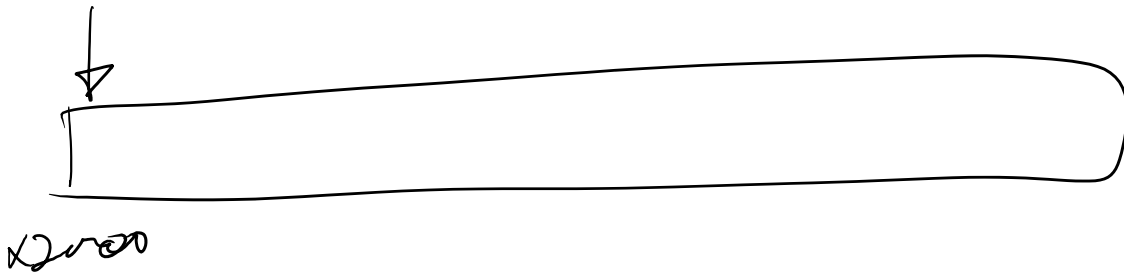
friends[0]

friends[1] = X(friend + 1)

year	m/d	name
y	m/d	

y	m/d	name	y	m/d	name	y	...
---	-----	------	---	-----	------	---	-----

```
int * intptr = x2000;  
char * charptr = x2000;  
short * shortptr = x2000;
```



```
intptr++; // x2004
```

```
charptr++; // x2001
```

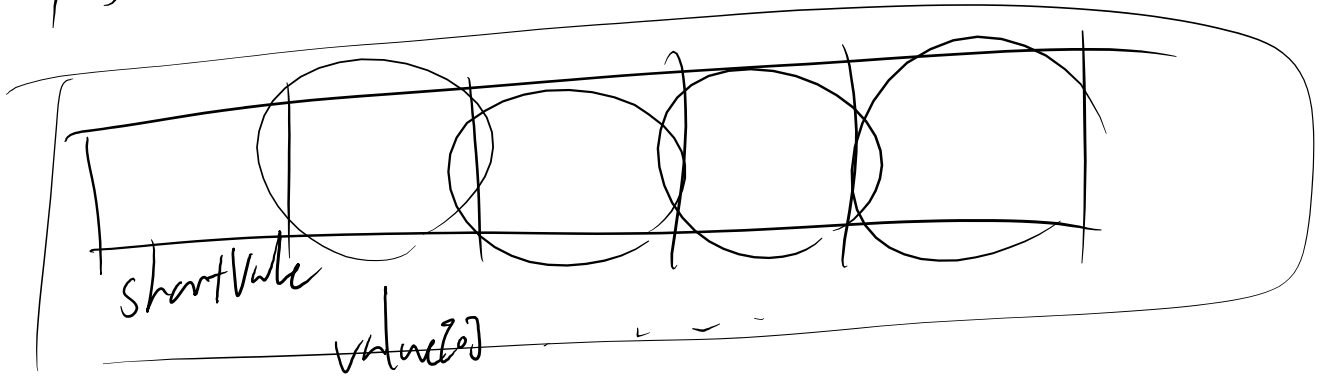
```
shortptr++; // x2002
```

```
Friend * ptr; // x2000
```

```
ptr++; // x2000 + sizeof(Friend)
```

```
struct TEST{  
    short shortValue;  
    int value[4];  
};
```

};



```
struct TEST t;  
    f, value [1];
```