

# 1.Text file

```
//doc, ghi text file (Copy)
#include <stdio.h>
int main(){
    FILE *infile, *outfile; //Khai bao con tro doc, ghi file
    char ch; //khai bao ki tu
    infile = fopen("input.txt", "r"); //Mo 1 file, che do doc
    if (infile == NULL){
        printf("khong co file input.txt \n");
        return 1;
    }
    outfile = fopen("output.txt", "w"); //Mo 1 file, che do ghi
    if (outfile == NULL){
        printf("khong co file output.txt \n");
        fclose(infile); //dong file
        return 1;
    }
    while((ch = fgetc(infile)) != EOF){ //kiem tra neu khong phai cuoi file
        fputc(ch, outfile); //copy tu input.txt sang utput.txt
    }
    fclose(infile); //dong file nguon
    fclose(outfile); //dong file dich
    printf("Sao chep thanh cong\n");
    return 0;
}
```

input.txt	Text file.c	output.txt
1	1	Hello World
2	2	Cong hoa xa hoi chu nghia Viet Nam
3	3	Toi yeu EHC
4	4	Dai hoc FPT

Sao chép thành công

-----  
Process exited after 0.0372 seconds with return value 0  
Press any key to continue . . .

	input.txt	Text file.c	output.txt
1	Hello World		
2	Cong hoa xa hoi chu nghĩa Việt Nam		
3	Toi yêu EHC		
4	Đại học FPT		

## 2. Binary file

```
//doc, ghi nhi phan file (copy)
#include <stdio.h>
int main()
{
    FILE *in, *out; //khai bao 2 con tro doc file
    char buffer[1024]; //doc 1kb
    size_t bytes; //kich thuoc doc
    in = fopen("input.bin", "rb"); //mo file nhi phan, che do doc
    if (in == NULL){
        printf("khong co file input.bin\n");
        return 1;
    }
    out = fopen("output.bin", "wb"); //mo file nhi phan, che do ghi
    if(out == NULL){
        printf("khogn co file output.bin\n");
        fclose(in);
        return 1;
    }
    while((bytes = fread(buffer, 1, sizeof(buffer), in)) > 0){ //neu co du lieu -> tiep tuc doc
        fwrite(buffer, 1, bytes, out); //ghi file
    }
    fclose(in); //dong file nguon
    fclose(out); //dong file dich
    printf("copy nhi phan thanh cong");
    return 0;
}
```

input.bin	Binary file.c	output.bin
-----------	---------------	------------

```
1 Hello World
2 Cong hoa xa hoi chu nghia Viet Nam
3 Toi yeu EHC
4 Dai hoc FPT
```

copy nhi phan thanh cong

-----  
Process exited after 0.03816 seconds with return value 0  
Press any key to continue . . .

input.bin	Binary file.c	output.bin
-----------	---------------	------------

```
1 Hello World
2 Cong hoa xa hoi chu nghia Viet Nam
3 Toi yeu EHC
4 Dai hoc FPT
```

### 3.Sequential file

```
//truy cap tuan tu
#include <stdio.h>
int main(){
    FILE *file; //con tro file
    char line[256]; //block=1 dong
    file = fopen("input.txt", "r"); //mo file tuan tu
    if(file == NULL){
        printf("khong mo duoc file input.txt\n");
        return 1;
    }
    while(fgets(line, sizeof(file), file)){ //van con du lieu thi van doc
        printf("%s", line); //in ra man hinh
    }
    fclose(file); //dong file
    return 0;
}
```

input.txt Sequential file.c

```
1 Hello World
2 Cong hoa xa hoi chu nghia Viet Nam
3 Toi yeu EHC
4 Dai hoc FPT
```

```
Hello World
Cong hoa xa hoi chu nghia Viet Nam
Toi yeu EHC
Dai hoc FPT

-----
Process exited after 0.03752 seconds with return value 0
Press any key to continue . . . |
```

## 4.Indexed file

```
// Truy cap ngau nhien
#include <stdio.h>
int main(){
    FILE *in;
    char line[256]; //block=1 dong
    int soDong, dongHienTai = 1; //khai bao so dong doc, dong dien tai
    printf("Hay nhap vao so dong can doc: ");
    scanf("%d", &soDong);
    //mo file doc ngau nhien
    in = fopen("input.txt", "r");
    if(in == NULL){ //Kiem tra xem file co ton tai khong
        printf("Khong mo duc file input.txt\n");
        return 1;
    }
    //Tien hanh truy cap ngau nhien
    while(fgets(line, sizeof(line), in)){ //neu co du lieu thi tiep tuc doc
        printf("Dong %d: %s", soDong, line);
        if(dongHienTai==soDong){ //neu la dong cuoi cung
            printf("Dong %d: %s", soDong, line);
            break; //thoat khoi vong lap
        }
        dongHienTai++; //doc tiep cac dong tiep theo
    }
    //in ra man hinh
    if(dongHienTai < soDong){
        printf("Khong co du so dong can thiet\n");
    }
    fclose(in); //dong file
    return 0;
}
```

input.txt	Indexed file.c
1	Hello World
2	Cong hoa xa hoi chu nghia Viet Nam
3	Toi yeu EHC
4	Dai hoc FPT

Hay nhap vao so dong can doc: 4

Dong 4: Hello World

Dong 4: Cong hoa xa hoi chu nghia Viet Nam

Dong 4: Toi yeu EHC

Dong 4: Dai hoc FPT

Dong 4: Dai hoc FPT

-----

Process exited after 3.012 seconds with return value 0

Press any key to continue . . .