

本頁的範例，逐條列表，並不構成一份完整的程式。（進一步說明，請看下一個頁面）

```
//-----
double DArray[10];
float FArray[20];
int JArray[30];
char CArray[40];

FILE * pFile_b;
FILE * pFile;

//statements for Binary I/O from/to a file
pFile_b=fopen( "filename.bin", "rb");
pFile_b=fopen( "filename.bin", "wb");
rewind(pFile_b);
fread(Array, size, count, pFile_b); //input the whole array
fwrite(Array, size, count, pFile_b); //output the whole array
//Examples
fread(DArray, 8, 10, pFile_b);
fwrite(DArray, 8, 10, pFile_b);
fread(FArray, 4, 20, pFile_b);
fwrite(FArray, 4, 20, pFile_b);
fread(JArray, 4, 30, pFile_b);
fwrite(JArray, 4, 30, pFile_b);
//
fclose(pFile_b);

//statements for Formatted I/O from/to a file

pFile=fopen( "filename.txt", "w");
pFile=fopen( "filename.txt", "r");
rewind(pFile);
fprintf(pFile, "format", var1, var2);
fscanf(pFile, "format", var1, var2);
//Examples
fprintf(pFile, "%30.16g %15.7g %d \n", DArray[0], FArray[1], JArray[2]);
fscanf(pFile, "%30.16g %15.7g %d \n", DArray[0], FArray[1], JArray[2]);
//
fread(Array, size, count, pFile); //input the whole array
fwrite(Array, size, count, pFile); //output the whole array
//Examples of I/O
fread(CArray, 1, 40, pFile);
fwrite(CArray, 1, 40, pFile);

//-----???????
fgets(Array, size+1, pFile); //input the whole array.
fputs(Array, pFile); //output the whole array
Array[k]=fgetc(pFile); //input only one element in the array
fputc(Array[k], pFile); //output only one element in the array
//Examples.
fgets(CArray, 41, pFile); // missing the last char if use array_size
fputs(CArray, pFile); //sometimes shows extract char at the end
CArray[0]=fgetc(pFile);
fputc(CArray[0], pFile);
//-----?????????

fclose(pFile);

//statements for format I/O from to the screen
printf( format, var1, var2, ...);
scanf( format, var1, var2, ...);
//Examples
scanf( "%30.16g %15.7g %d \n", DArray[0], FArray[1], JArray[2]);
printf( "%30.16g %15.7g %d \n", DArray[0], FArray[1], JArray[2]);
```

請大家參考C++的 `fscanf` 網頁說明以及最後的相關指令連結
<http://www.cplusplus.com/reference/cstdio/fscanf/>

C++ 的 I/O. 包含了

- 一開頭要記得加 `#include <stdio.h>` 或 `#include <iostream>`
- 用 `FILE *` 宣告 檔案變數
- 處理檔案的 `fopen`, `fclose`, `rewind` 等指令
- 處理 binary I/O, ASCII I/O, screen I/O 的相關指令
 - Input statements: `fread`, `fscanf`, `scanf`.
 - Output statements: `fwrite`, `fprintf`, `printf`.

其他 I/O 指令

- `cin`, `cout`, (一開頭要記得加 `using namespace std;`)
- `fgets`, `fputs` (建議少用, 有 bug), 最好用 `fread`, `fwrite` 取代之
- `fgetc`, `fputc` (建議少用, 有 bug), 最好用 `fprintf`, `fscanf` 取代之