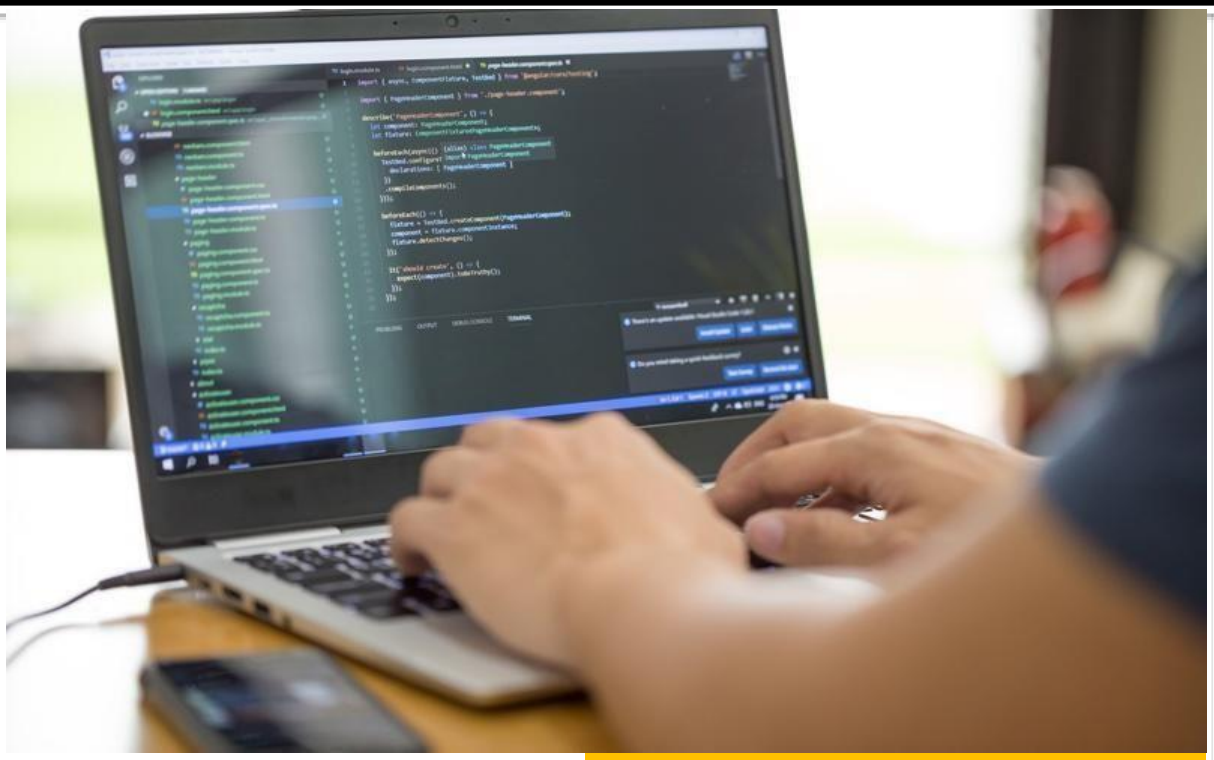
Build your IT Skill

ណែនាំ File C++ Programming

Text File Binary File



រៀបរៀងដោយ៖

គ្រូអោយចិត្តល្អ

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ណែនាំអោយស្គាល់ពី Files
ក្នុង C Programming

1. **ដូចម្តេចទៅដែលហៅថា** File Stream?

File Stream *សំដៅលើការរៀបចំការផ្ទុកទិន្នន័យជានិរន្តពោលគឺមិនបាត់បង់ដូច ពីមុនទៀតទេ។ ការផ្ទុកទិន្នន័យលើ* File *គឺជាទិន្នន័យត្រូវយកទៅផ្ទុកលើ* Hard Drive *ដូចជា* Hard Disk, USB, Memory *ជាដើម។ ដើម្បីធ្វើការលើ* File *អ្នកត្រូវធ្វើការកាត់នូវ លក្ខណ្ឌ ៣យ៉ាងគឺ៖*

១) Open File

២) Read/ Write File

៣) Close File

*ប្រភេទនៃ*File *ត្រូវបានគេបែកចែកជា ២ប្រភេទគឺ៖*

១) Text file

២) Binary file

2. Text file : *គឺជាប្រភេទនៃ* File *ដែលអាចធ្វើការ* Read/ Write data*លក្ខណៈជា* Text Processing *ពោលគឺទិន្នន័យត្រូវធ្វើការកាត់ការបំលែងទិន្នន័យជាមុនសិនដើម្បីយកផ្ទុក* file *ប្រភេទនេះគេអាចបើកមើលទិន្នន័យយល់ ជាធម្មតាគេចំណាំវាបានលើ* (*.txt) *។*

ឧទាហរណ៍ ១៖ ចូរធ្វើការ Write *ទិន្នន័យចូលក្នុង* File

```cpp
//C++ program to write and read text in/from file.
#include <iostream>
#include <fstream>
using namespace std;
int main()
{
    fstream file; //object of fstream class
    //opening file "sample.txt" in out(write) mode
    char text[100];
    file.open("etec.txt",ios::out);
    if(!file)
    {
        cout<<"Error in creating file!!!"<<endl;
        return 0;
    }

    cout<<"File created successfully."<<endl;
    cout<<"Input Text to write=";
    cin.getline(text,100);
    //write text into file
    file<<text;
    //closing the file
    file.close();
    return 0;
}
```

លទ្ធផលទទួលបាន៖

```
C:\Users\Etec Center\Documents\Untitled1.exe
File created successfully.
Input Text to write=ETEC Center, Build Your IT Skill

--------------------------------
Process exited after 16.4 seconds with return value 0
Press any key to continue . . .
```

លទ្ធផលទិន្នន័យ៖

```
1  ETEC Center, Build Your IT Skill
```

ឧទាហរណ៍ ២៖ ចូរធ្វើការ Read ទិន្នន័យចេញពីក្នុង Fileវិញ

```
1  //C++ program to write and read text in/from file.
2  #include <iostream>
3  #include <fstream>
4  using namespace std;
5  int main()
6  {
7       fstream file; //object of fstream class
8      //again open file in read mode
9     file.open("etec.txt",ios::in);
10    if(!file)
11    {
12        cout<<"Error in opening file!!!"<<endl;
13        return 0;
14    }
15    //read untill end of file is not found.
16    char ch; //to read single character
17    cout<<"File content: ";
18    while(!file.eof())
19    {
20        file>>ch; //read single character from file
21        cout<<ch;
22    }
23
24    file.close(); //close file
25    return 0;
26 }
```

លទ្ធផលទទួលបាន៖

```
C:\Users\Etec Center\Documents\Untitled1.exe
File content: ETECCenter,BuildYourITSkilll
--------------------------------
Process exited after 0.05168 seconds with return value 0
Press any key to continue . . .
```

ឧទាហរណ៍ ៣៖ ចូរធ្វើការ Write ទិន្នន័យចូលក្នុង File

```
1  //C++ program to write and read text in/from file.
2  #include <iostream>
3  #include <fstream>
4  #include<conio.h>
5  using namespace std;
6  int main()
7  {
8     fstream file; //object of fstream class
9     //opening file "sample.txt" in out(write) mode
10     int code;
11     char name[20];
12     char sex;
13     float score;
14 do{system("cls");
15    file.open("students.txt",ios::app);
16    if(!file)
17    {
18        cout<<"Error in creating file!!!"<<endl;
19        return 0;
20    }
21    cout<<">>>>Start Input Data>>>>>"<<endl;
22    cout<<"Input Code=";cin>>code;
23    cin.ignore();
24    cout<<"Input Name=";cin.getline(name,20);
25    cout<<"Input Sex=";cin>>sex;
26    cout<<"Input Score=";cin>>score;
27
28    //write text into file
29    file<<code<<"  "<<name<<"   "<<sex<<"   "<<score<<endl;
30    //closing the file
31    cout<<"Write Completed!"<<endl;
32    file.close();
33   cout<<"Press Enter to Continue....!";
34 }while(getch()==13);
35    return 0;
36 }
```

លទ្ធផលទិន្នន័យ៖

```
1  1001  Sok Dara   M   56
2  1002  Lim Kim   M   89
3  1003  Chan Vanna   M   89
```

*ឧទាហរណ៍ ៤៖ ចូរធ្វើការ Read ទិន្នន័យចេញពីក្នុង File*វិញ

```
1  //C++ program to write and read text in/from file.
2  #include <iostream>
3  #include <fstream>
4  #include<conio.h>
5  using namespace std;
6  int main()
7  {
8     fstream file; //object of fstream class
9     //opening file "sample.txt" in out(write) mode
10     char line[20];
11    file.open("students.txt",ios::in);
12    if(!file)
13    {
14        cout<<"Error in creating file!!!"<<endl;
15        return 0;
16    }
17   cout << "Reading from a text file:" << endl;
18   while (!file.eof())
19     {
20         file.getline(line, 100);
21         cout << line << endl;
22     }
23    file.close();
24    return 0;
25 }
26
```

លទ្ធផលទទួលបាន៖

ខាងក្រោមគឺជាប្រភេទ Class **នៃ** File **ដូចជា៖**

- Ofstream: *គឺជាប្រភេទ* Stream *ដែលប្រើប្រាស់សំរាប់* Write *ទិន្នន័យចូល* File *និងអាចបង្កើតនូវ* Files *ប្រសិនបើវាមិនទាន់មាននោះ។*
- Ifstream: *គឺជាប្រភេទ* files Stream *ដែលប្រើប្រាស់សំរាប់ធ្វើការ* Read *ទិន្នន័យចេញពីក្នុង* files *ដែលមានរួចស្រេចហើយនោះ។*
- fstream: *គឺជាប្រភេទ* file stream *ដែលអាចអោយគេ បានទាំង* Read *និង* Write *ទិន្នន័យចូលក្នុង* file *ណាមួយច្បាស់លាស់ ។*

  ខាងក្រោមគឺជា Mode *សំខាន់ៗរបស់* file *ដូចជា ៖*

  1. ios::app *គឺជាប្រភេទ* Mode *ដែលអាចធ្វើការ* Write *បន្ថែមតែវាមិន បាត់បង់ទិន្នន័យចាស់នោះទេពោលគឺវា តពីទិន្នន័យចាស់ ។*
  2. ios::ate *គឺជាប្រភេទ* mode *ដែលរំកិល* pointer *សំរាប់ការ* read/ write *ទិន្នន័យទៅ ទីតាំងចុងក្រោយនៃ* files*។*
  3. ios:: in *គឺជាប្រភេទ* mode *សំរាប់ការ* read *ទិន្នន័យចេញពី* files
  4. ios:: out *គឺជាប្រភេទ* Mode *សំរាប់ការ* Write *ទិន្នន័យចូលក្នុង* file

ឧទាហរណ៍ ៥៖ Write Data to files

```cpp
#include<iostream>
#include<fstream>
using namespace std;
class Employee {
public:
    // Instance variables
    char Name[20];
    char sex;
    int age;
};
int main()
{
    int n,i;
    ofstream file_obj;
    file_obj.open("Employee.txt", ios::app);
    Employee obj;
    cout<<"Input Number of Employee=";cin>>n;
    for(i=0;i<n;i++)
    {
        cout<<"Input Name=";cin>>obj.Name;
        cout<<"Input Sex[M/F]=";cin>>obj.sex;
        cout<<"Input Age=";cin>>obj.age;
        file_obj.write((char*)&obj, sizeof(obj));
    }
     file_obj.close();
    return 0;
}
```

លទ្ធផលទទួលបាន៖

```
Sok ÿÿÿÿEè@  ▯  M  ▯  Vanna ÿÿEè@  ▯  M  Kim ÿÿÿÿEè@  ▯  F  "  Ly  ÿÿÿÿEè@  ▯  M  ▯
```

ឧទាហរណ៍ ៦៖ Read data from file

```
#include<iostream>
#include<fstream>
using namespace std;
class Employee {
public:
    // Instance variables
    char Name[20];
    char sex;
    int age;
};
int main()
{  Employee obj;
    ifstream file_obj;
    file_obj.open("Employee.txt", ios::in);
    file_obj.read((char*)&obj, sizeof(obj));
    cout<<"    ==============================\n";
    cout<<"        Your Data Information\n";
    cout<<"    ==============================\n";
   while (!file_obj.eof()) {
      cout<<"        "<<obj.Name<<"   "<<obj.sex<<"    "<<obj.age<<endl;
      cout<<"      ------------------------------------\n";
      file_obj.read((char*)&obj, sizeof(obj));
   }
   cout<<"Good Luck...!\n";
    return 0;
}
```

លទ្ធផលទទួលបាន៖

```
C:\Users\Etec Center\Documents\Untitled2.exe
    ==============================
        Your Data Information
    ==============================
        Sok   M    23
      ------------------------------------
        Vanna   M    30
      ------------------------------------
        Kim   F    34
      ------------------------------------
        Ly   M    27
      ------------------------------------
Good Luck...!
```

3. Binary file: *គឺជាប្រភេទ* File *ដែលការ* Processing(Read/Write) *ត្រូវបំលែង ជា*Binary Data *ជាមុនសិន។*

ឧទាហរណ៏ ១៖ Write *ទិន្នន័យចូលក្នុង* files

```
#include <iostream>
#include <fstream>
#include<conio.h>
using namespace std;
int main()
{  fstream file;
    int code;
    char name[20];
    char sex[20];
    float score;
    char str[100];
do{ system("cls");
   file.open("etec-student.bin",ios::app|ios::binary);
   if(!file)
   {
       cout<<"Error in creating file!!!"<<endl;
       return 0;
   }
   cout<<">>>>Start Input Data>>>>>"<<endl;
   cout<<"Input Code=";cin>>code;
   cin.ignore();
   cout<<"Input Name=";cin.getline(name,20);
   cout<<"Input Sex=";cin>>sex;
   cout<<"Input Score=";cin>>score;
   //make string to write
    sprintf(str,"%d  %s  %s  %f",code,name,sex,score);
    //write into file
    file.write(str,sizeof(str));
    cout<<""<<str<<"\nhas been written into file....."<<endl;
    file.close();
   cout<<"Write Completed!"<<endl;
   file.close();
  cout<<"Press Enter to Continue....!";
 }while(getch()==13);
   return 0;
}
```

លទ្ធផលទទួលបាន៖

```
1001  Lim  Male  90.000000      @▯~     ▯ü+▯ý▯  èûo      ZH     `êH          pÞH     ÀmH     €▯I 1002  Kim  Male  67.000000
```

ឧទាហរណ៍ ២៖ Read ទិន្នន័យចេញពីក្នុង files

```
#include <iostream>
#include <fstream>
#include<conio.h>
using namespace std;
int main()
{  fstream file;
    int code;
    char name[20];
    char sex[20];
    float score;
    char str[100];
   file.open("etec-student.bin",ios::in|ios::binary);
   if(!file)
   {
       cout<<"Error in creating file!!!"<<endl;
       return 0;
   }
   file.read((char*)str,sizeof(str));
   cout<<"        Students List         \n";
   cout<<"     ================================\n";
   cout<<"       Code    Name     Sex       Score\n";
   cout<<"     ================================\n";
    while (!file.eof()) {
        sscanf(str,"%d %s %s %f",&code,&name,&sex,&score);
        cout<<"       | "<<code<<"  "<<name<<"   "<<sex<<"    "<<score<<endl;
        cout<<"    ------------------------------------\n";
        file.read((char*)str,sizeof(str));
    }
    file.close();


   return 0;
}
```

លទ្ធផលទទួលបាន៖

```
    Students List
 ================================
   Code    Name     Sex       Score
 ================================
    1001  Lim   Male   90
 ------------------------------------
    1002  Kim   Male   67
 ------------------------------------
    1003  Vanna   Female   98
 ------------------------------------
    1004  Lyna   Female   50
 ------------------------------------
```

ឧទាហរណ៍ ៣៖

```cpp
#include<iostream>
#include<fstream>
#include<conio.h>
#include<iomanip>
#include<stdlib.h>
#include<string.h>
using namespace std;
class product{
    private:
        int code,qty;
        char name[20];
        float price;
    public:
        int getCode(){
            return code;
        }
        char *getName(){
            return name;
        }
        void Input(){
            cout<<" Input Code  =";cin>>code;
            cout<<" Input Name  =";cin.ignore();cin.getline(name,20);
            cout<<" Input Qty   =";cin>>qty;
            cout<<" Input Price =";cin>>price;
        }
        double Total(){
            return price*qty;
        }
        int Discount(){
            if(Total()>=1 && Total()<=10){
                return 10;
            }else if(Total()>10 && Total()<=20){
                return 20;
            }else if(Total()>20 && Total()<=30){
                return 30;
            }else{
                return 40;
            }
        }
        double Payment(){
            return Total()-(Total()*Discount())/100;
        }
```

```
43          void Output(){
44              cout<<setw(14)<<code
45                  <<setw(14)<<name
46                  <<setw(13)<<qty
47                  <<setw(14)<<price<<"$"
48                  <<setw(14)<<Total()<<"$"
49                  <<setw(16)<<Discount()<<"%"
50                  <<setw(16)<<Payment()<<"$"
51                  <<endl;
52          }
53  };
54  void Header(){
55      cout<<setw(14)<<"Code"
56          <<setw(14)<<"Name"
57          <<setw(13)<<"Qty"
58          <<setw(15)<<"Price"
59          <<setw(15)<<"Total"
60          <<setw(17)<<"Discount"
61          <<setw(17)<<"Payment"
62          <<endl;
63  }
64  void Option(){
65      cout<<"\n_____|...Shop...|_____"<<endl;
66          cout<<" 1.Write"<<endl;
67          cout<<" 2.Read"<<endl;
68          cout<<" 3.Search"<<endl;
69          cout<<" 4.Update"<<endl;
70          cout<<" 5.Remove"<<endl;
71          cout<<" 6.Insert"<<endl;
72          cout<<" 7.Sort"<<endl;
73          cout<<" 8.Append"<<endl;
74          cout<<"_____"<<endl;
75  }
76  int main(){
77      product pro;
78      int i,n,op;
79      fstream etec;
80      Back:
81          Option();
82          cout<<" Please Choose One Option =";cin>>op;
83          switch(op){
84              case 1:{
```

```
85                  etec.open("product.bin",ios::out|ios::binary);
86                  if(!etec){
87                      cout<<" Error! creating file...!"<<endl;
88                      exit(0);
89                  }
90                  cout<<" Input number of product =";cin>>n;
91                  for(i=0;i<n;i++){
92                      cout<<"\n_________product #"<<i+1<<"_________"<<endl;
93                      pro.Input();
94                      etec.write((char*)&pro,sizeof(pro));
95                  }
96                  etec.close();
97              }break;
98              case 2:{
99                  etec.open("product.bin",ios::in|ios::binary);
100                 if(!etec){
101                     cout<<" Error! in opening file...!"<<endl;
102                     exit(0);
103                 }
104                 Header();
105                 while(etec.read((char*)&pro,sizeof(pro))){
106                     pro.Output();
107                 }
108                 etec.close();
109             }break;
110             case 3:{
111                 etec.open("product.bin",ios::in|ios::binary);
112                 if(!etec){
113                     cout<<" Error! in opening file...!"<<endl;
114                     exit(0);
115                 }
116                 char sname[20];
117                 bool b=false;
118                 cout<<" Input product's name for search =";
119                 cin.ignore();cin.getline(sname,20);
120                 while(etec.read((char*)&pro,sizeof(pro))){
121                     if(stricmp(sname,pro.getName())==0){
122                         Header();
123                         pro.Output();
124                         b=true;
125                     }
126                 }
```

```
127             if(b==false){
128                 cout<<" Search product's name not found...!"<<endl;
129             }
130             etec.close();
131         }break;
132         case 4:{
133             etec.open("product.bin",ios::in|ios::binary);
134             if(!etec){
135                 cout<<" Error! in opening file...!"<<endl;
136                 exit(0);
137             }
138             fstream temp;
139             temp.open("temp.bin",ios::out|ios::binary);
140             if(!temp){
141                 cout<<" Error! in creating file...!"<<endl;
142                 exit(0);
143             }
144             int scode;
145             bool b=false;
146             cout<<" Input product's code for search to update =";cin>>scode;
147             while(etec.read((char*)&pro,sizeof(pro))){
148                 if(scode==pro.getCode()){
149                     pro.Input();
150                     temp.write((char*)&pro,sizeof(pro));
151                     b=true;
152                     cout<<"\n update successful."<<endl;
153                 }else{
154                     temp.write((char*)&pro,sizeof(pro));
155                 }
156             }
157             if(b==false){
158                 cout<<"\n Search product's code not found...!"<<endl;
159             }
160             etec.close();
161             temp.close();
162             remove("product.bin");
163             rename("temp.bin","product.bin");
164         }break;
165         case 5:{
166             etec.open("product.bin",ios::in|ios::binary);
167             if(!etec){
168                 cout<<" Error! in opening file...!"<<endl;
```

```
169                     exit(0);
170                 }
171                 fstream temp;
172                 temp.open("temp.bin",ios::out|ios::binary);
173                 if(!temp){
174                     cout<<" Error! in creating file...!"<<endl;
175                     exit(0);
176                 }
177                 int scode;
178                 bool b=false;
179                 cout<<" Input product's code for search to remove =";cin>>scode;
180                 while(etec.read((char*)&pro,sizeof(pro))){
181                     if(scode==pro.getCode()){
182                         b=true;
183                         cout<<"\n remove successful."<<endl;
184                     }else{
185                         temp.write((char*)&pro,sizeof(pro));
186                     }
187                 }
188                 if(b==false){
189                     cout<<"\n Search product's code not found...!"<<endl;
190                 }
191                 etec.close();
192                 temp.close();
193                 remove("product.bin");
194                 rename("temp.bin","product.bin");
195             }break;
196             case 6:{
197                 etec.open("product.bin",ios::in|ios::binary);
198                 if(!etec){
199                     cout<<" Error! in opening file...!"<<endl;
200                     exit(0);
201                 }
202                 fstream temp;
203                 temp.open("temp.bin",ios::out|ios::binary);
204                 if(!temp){
205                     cout<<" Error! in creating file...!"<<endl;
206                     exit(0);
207                 }
208                 product pro1;
209                 int scode;
210                 bool b=false;
```

```
211             cout<<" Input product's code for search to insert =";cin>>scode;
212             while(etec.read((char*)&pro,sizeof(pro))){
213                 if(scode==pro.getCode()){
214                     pro1.Input();
215                     temp.write((char*)&pro1,sizeof(pro1));
216                     temp.write((char*)&pro,sizeof(pro));
217                     b=true;
218                     cout<<"\n insert completed."<<endl;
219                 }else{
220                     temp.write((char*)&pro,sizeof(pro));
221                 }
222             }
223             if(b==false){
224                 cout<<"\n search product's code not found...!"<<endl;
225             }
226             etec.close();
227             temp.close();
228             remove("product.bin");
229             rename("temp.bin","product.bin");
230         }break;
231         case 7:{
232             etec.open("product.bin",ios::in|ios::binary);
233             if(!etec){
234                 cout<<" Error! in opening file...!"<<endl;
235                 exit(0);
236             }
237             fstream temp;
238             temp.open("temp.bin",ios::out|ios::binary);
239             if(!temp){
240                 cout<<" Error! in creating file...!"<<endl;
241                 exit(0);
242             }
243             product array[100],ttemp,sort;
244             int count=0;
245             while(etec.read((char*)&pro,sizeof(pro))){
246                 array[count]=pro;
247                 count++;
248             }
249             for(i=0;i<count;i++){
250                 for(int j=i+1;j<count;j++){
251                     if(array[i].Payment() > array[j].Payment()){
252                         ttemp=array[i];
```

```
253                             array[i]=array[j];
254                             array[j]=ttemp;
255                         }
256                     }
257                     sort=array[i];
258                     temp.write((char*)&sort,sizeof(sort));
259                 }
260                 cout<<"\n sort completed.";
261                 etec.close();
262                 temp.close();
263                 remove("product.bin");
264                 rename("temp.bin","product.bin");
265             }break;
266             case 8:{
267                 etec.open("product.bin",ios::app|ios::binary);
268                 if(!etec){
269                     cout<<" Error! creating file...!"<<endl;
270                     exit(0);
271                 }
272                 cout<<" Input number of product to append =";cin>>n;
273                 for(i=0;i<n;i++){
274                     cout<<"\n_________product #"<<i+1<<"_________"<<endl;
275                     pro.Input();
276                     etec.write((char*)&pro,sizeof(pro));
277                 }
278                 etec.close();
279                 cout<<"\n append completed."<<endl;
280             }break;
281         }
282     cout<<"\n Press [esc] to continue...";
283     if(getch()==27) goto Back;
284     return 0;
285 }
```

ឧទាហរណ៍ ៤៖

```
#include<iostream>
#include<fstream>
using namespace std;
class Student
{
    char name[20];
    int mark;
public:
    void GetStudentData();
    void ShowStudentData();
};
int main()
{   char ans='y';
    Student sobj;
    //We open student.dat in append mode
    ofstream out("student.dat", ios::app);
    if(out.is_open())
    {
        //Loop will continue until something other then y is enter
        cout<<"Press y to Continue....!";
        while( ans == 'y')
        {
            cout << endl << "Continue ?";
            cin >> ans;
            if(ans == 'y')
            {
                sobj.GetStudentData();
                out.write((char*) & sobj, sizeof(sobj));
            }
        }
    }
    out.close();
    ifstream in("student.dat");
    if(in.is_open())
    {
        while(!in.eof())
        {
            in.read((char*) &sobj, sizeof(sobj));
            if(!in.eof())
            {
            sobj.ShowStudentData();
            }
        }
    }
    in.close();
}
```

លទ្ធផលទទួលបាន៖

```
C:\Users\Etec Center\Documents\Untitled2.exe
Press y to Continue....!
Continue ?no
Student Details are:
Name: Sok
Mark: 78
Student Details are:
Name: Kim
Mark: 89

--------------------------------
Process exited after 5.956 seconds with return value 0
Press any key to continue . . .
```

ឧទាហរណ៍ ៥៖

```
#include <iostream>
#include <fstream>
#define FILE_NAME "emp.dat"

using namespace std;

//class employee declaration
class Employee {
private :
        int     empID;
        char    empName[100] ;
        char    designation[100];
        int     ddj,mmj,yyj;
        int     ddb,mmb,yyb;
public  :
        //function to read employee details
        void readEmployee(){
                cout<<"EMPLOYEE DETAILS"<<endl;
                cout<<"ENTER EMPLOYEE ID : " ;
                cin>>empID;
                cin.ignore(1);
                cout<<"ENTER  NAME OF THE EMPLOYEE : ";
                cin.getline(empName,100);

                cout<<"ENTER DESIGNATION : ";
                cin.getline(designation,100);

                cout<<"ENTER DATE OF JOIN:"<<endl;
                cout<<"DATE : "; cin>>ddj;
                cout<<"MONTH: "; cin>>mmj;
                cout<<"YEAR : "; cin>>yyj;

                cout<<"ENTER DATE OF BIRTH:"<<endl;
                cout<<"DATE : "; cin>>ddb;
                cout<<"MONTH: "; cin>>mmb;
                cout<<"YEAR : "; cin>>yyb;
        }
        //function to write employee details
        void displayEmployee(){
                cout<<"EMPLOYEE ID: "<<empID<<endl
                 <<"EMPLOYEE NAME: "<<empName<<endl
                 <<"DESIGNATION: "<<designation<<endl
                 <<"DATE OF JOIN: "<<ddj<<"/"<<mmj<<"/"<<yyj<<endl
                 <<"DATE OF BIRTH: "<<ddb<<"/"<<mmb<<"/"<<yyb<<endl;
        }
};
```

```
int main(){

        //object of Employee class
        Employee emp;
        //read employee details
        emp.readEmployee();

        //write object into the file
        fstream file;
        file.open(FILE_NAME,ios::out|ios::binary);
        if(!file){
                cout<<"Error in creating file...\n";
                return -1;
        }

        file.write((char*)&emp,sizeof(emp));
        file.close();
        cout<<"Date saved into file the file.\n";

        //open file again
        file.open(FILE_NAME,ios::in|ios::binary);
        if(!file){
                cout<<"Error in opening file...\n";
                return -1;
        }

        if(file.read((char*)&emp,sizeof(emp))){
                        cout<<endl<<endl;
                        cout<<"Data extracted from file..\n";
                        //print the object
                        emp.displayEmployee();
        }
        else{
                cout<<"Error in reading data from file...\n";
                return -1;
        }

        file.close();
        return 0;
}
```

លំហាត់អនុវត្តន៏ ១៖

គេមាននូវ Class *មួយដូចខាងក្រោម៖*

```
1  class Dictionary{
2      private:
3          char word[20];
4          char speech[20];
5          char des[50];
6      public:
7         void Input();
8         void Output();
9
10 };
11
12   >>>>>>>> Menu <<<<<<<<<
13     1. Write
14     2. Read
15     3. Search
16     4. Delete
17     4. Exit
18      Choose One=____
19
```

4. Delete Content binary file

នៅក្នុង C++ Programming *អ្នកអាចធ្វើការលុបទិន្នន័យចេញពី* File *បានទៅតាម ជំហានខាងក្រោមនេះ៖*

```
2
3  // to remove the file
4  remove("name_of_file");
5
6  // to rename file1 as file2
7  rename("name-of_file1", "name_of_file2");
```

ឧទាហរណ៍ ៖

```
1   int pos, flag = 0;
2      ifstream ifs;
3      ifs.open("he.dat", ios::in | ios::binary);
4      ofstream ofs;
5      ofs.open("temp.dat", ios::out | ios::binary);
6      while (!ifs.eof()) {
7          ifs.read((char*)this, sizeof(abc));
8          // if(ifs)checks the buffer record in the file
9          if (ifs) {
10
11             // comparing the roll no with
12             // roll no of record to be deleted
13             if (rno == roll) {
14                 flag = 1;
15                 cout << "The deleted record is \n";
16
17                 // display the record
18                 putdata();
19             }
20             else {
21                 // copy the record of "he" file to "temp" file
22                 ofs.write((char*)this, sizeof(abc));
23             }
24         }
25     }
26     ofs.close();
27     ifs.close();
28     // delete the old file
29     remove("he.dat");
30     // rename new file to the older file
31     rename("temp.dat", "he.dat");
32     if (flag == 1)
33         cout << "\nrecord successfully deleted \n";
34     else
35         cout << "\nrecord not found \n";
```