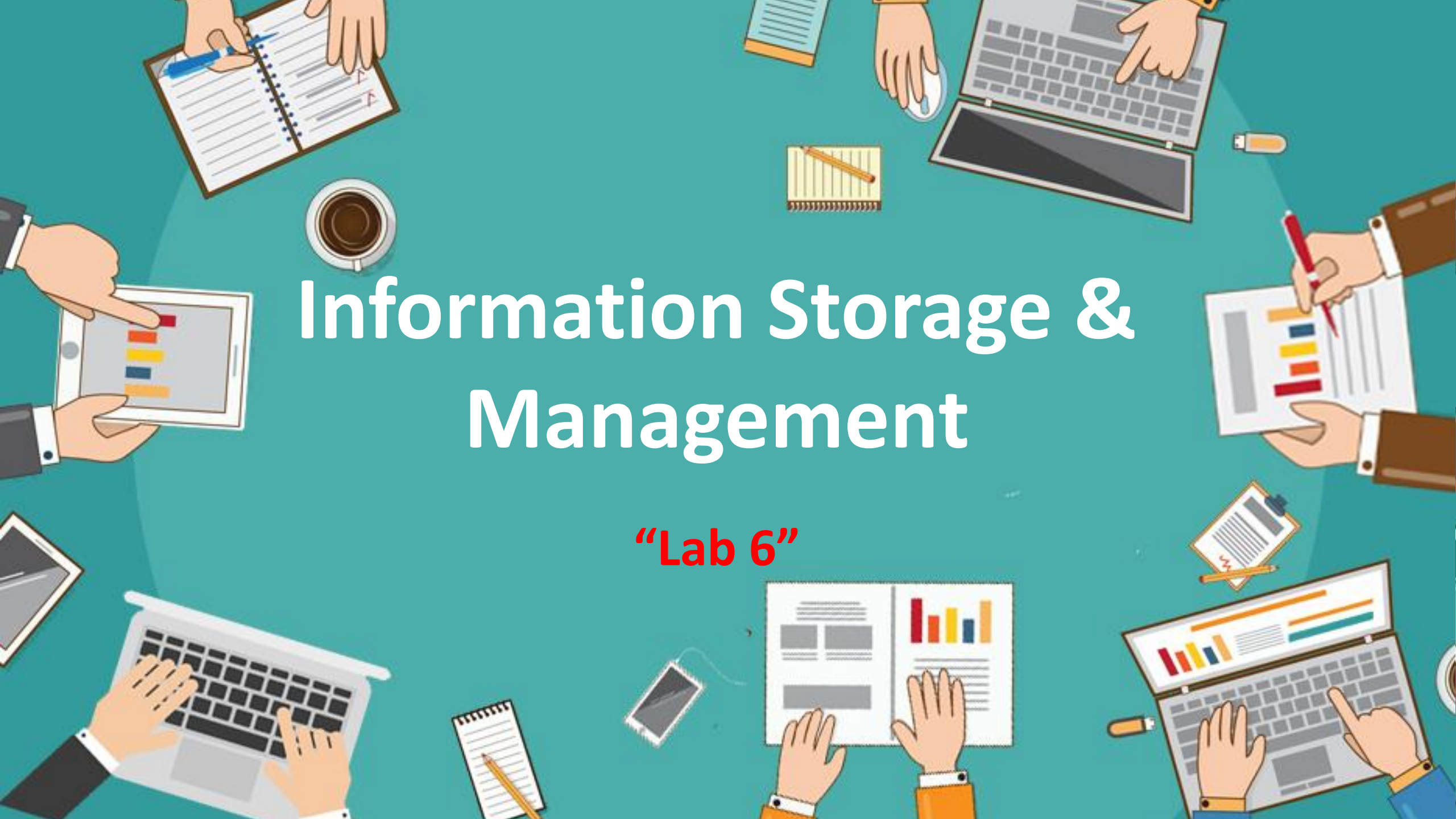
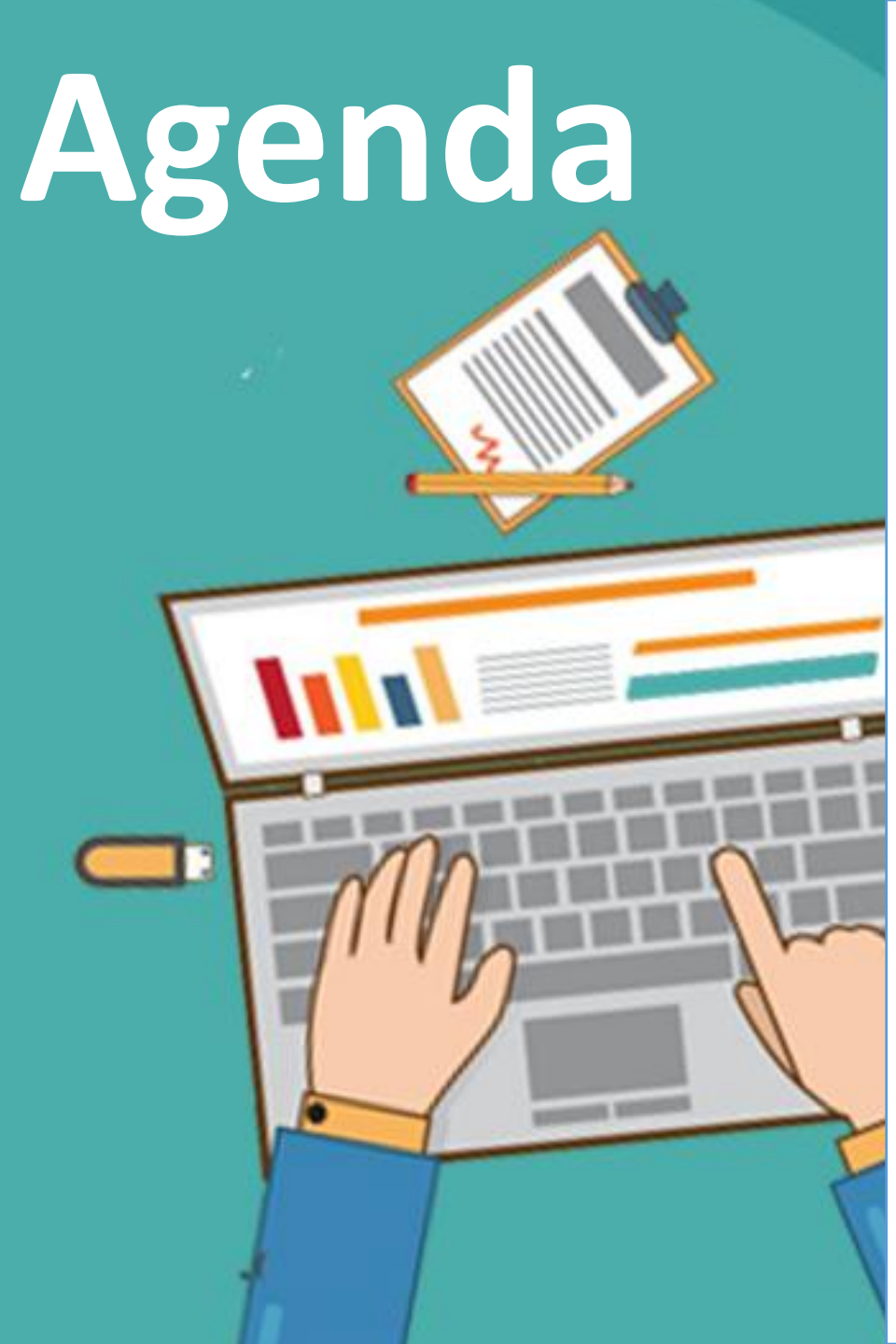


Information Storage & Management

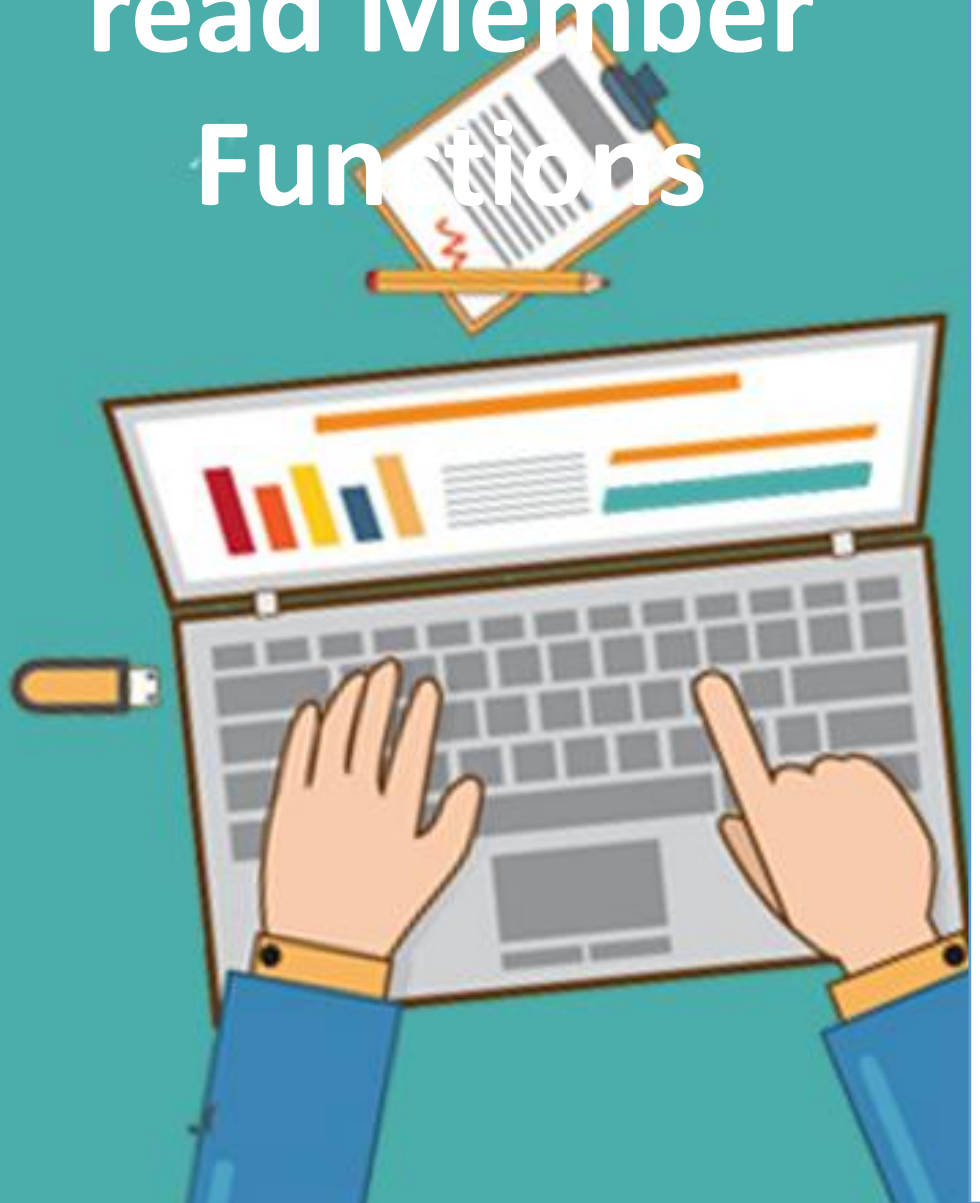
"Lab 6"

Agenda



- ❑ Read & Write functions
- ❑ Fixed length for organizing files

The write and read Member Functions



The file stream object's used two member function to read and write data to binary file.

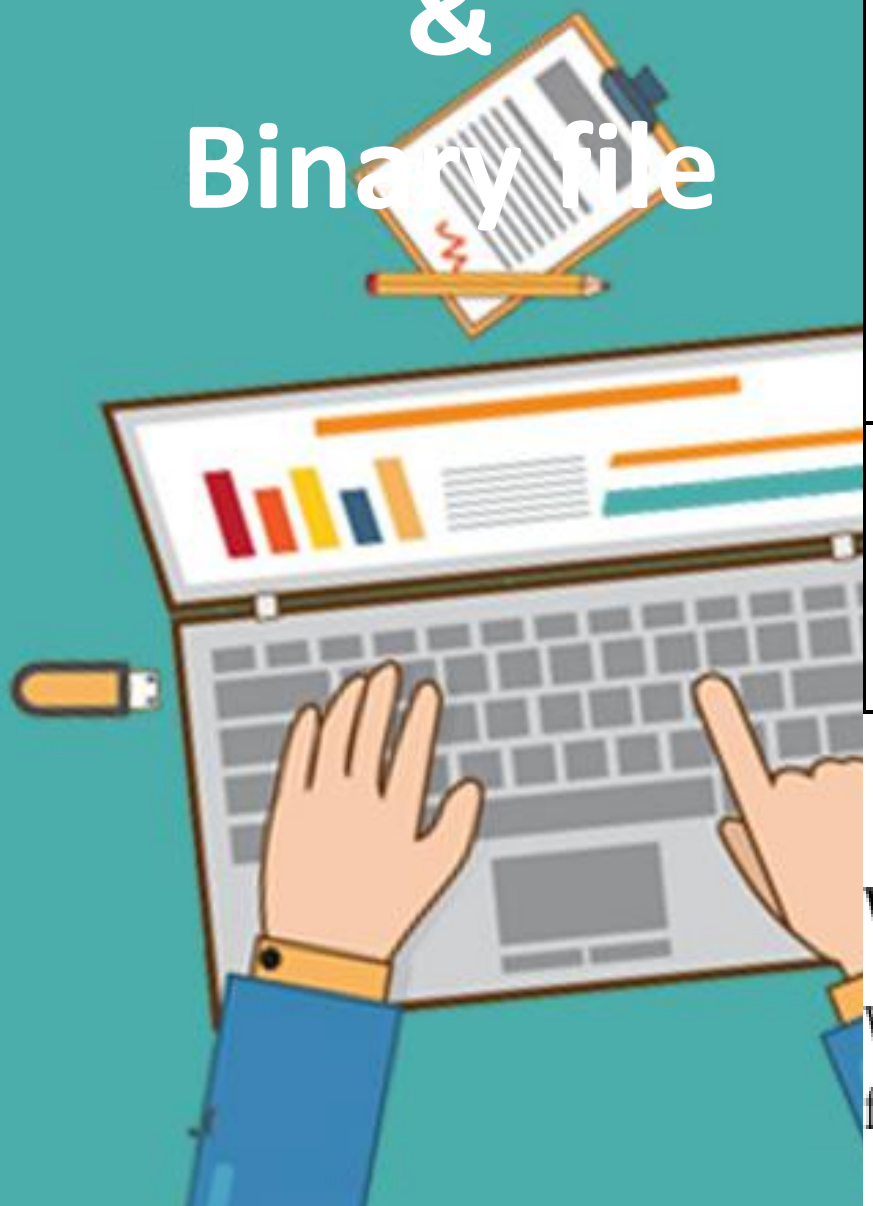
- **Write member function used to write binary data to a file. The general format of the write function is:**

fileObject.write(address, size);

- **Read member function is used to read binary data from a file into memory. The general format of the read member function is:**

fileObject.read(address, size);

Text file & Binary file



Text File	Binary File
Data stored in the files formatted as **ASCII** text. (Data when stored in a file with the << operator, is converted to text when we double click to open them.)	**Data** stored in the files in the same form of representation in main memory.
Consists of readable characters separated into lines by newline characters.	Do not normally use anything to separate the data into lines.

Why used Binary Files?

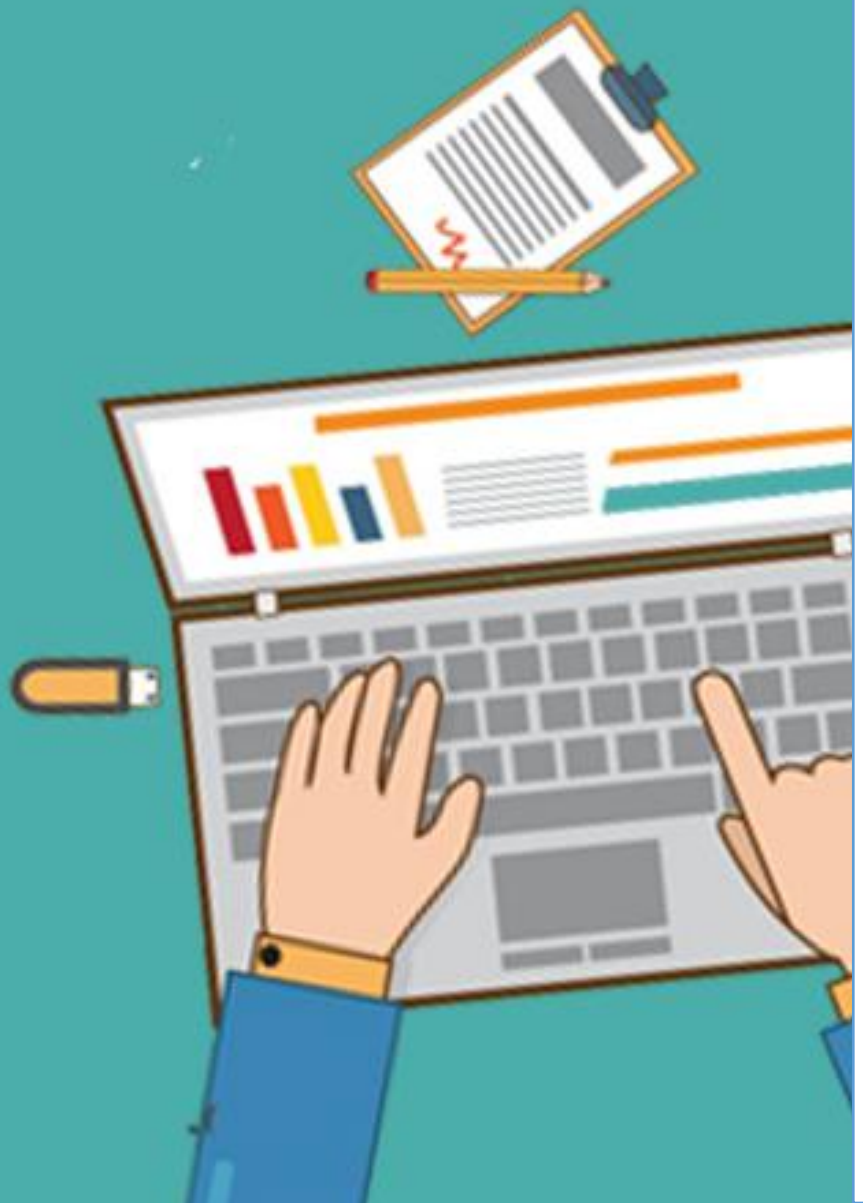
When data is stored in a file with binary format the process of Reading & Writing being faster because, No time is lost in converting the data from one format to another format.

Writing

```
#include<iostream>
#include<fstream>
using namespace std;
struct student
{
char name[20],
address[20];
};
```

```
ofstream file;
file.open("aya1.txt", ios::binary);
student stu;
strcpy_s(stu.name, "bfcai");
strcpy_s(stu.address, "Benha");
//cin >> stu.name;
//cin >> stu.address;
////////////////////////////////////
file.write(stu.name,20);
file.write(stu.address,20);
//file.write((char*)&stu, sizeof(stu));
file.close();
```

Reading



```
ifstream file;
file.open("aya1.txt",ios::binary);
student stu2;
file.read((char*)&stu2, sizeof(stu2));
cout << stu2.name << " " << stu2.address;
file.close();
system("pause");
```


THANKS!