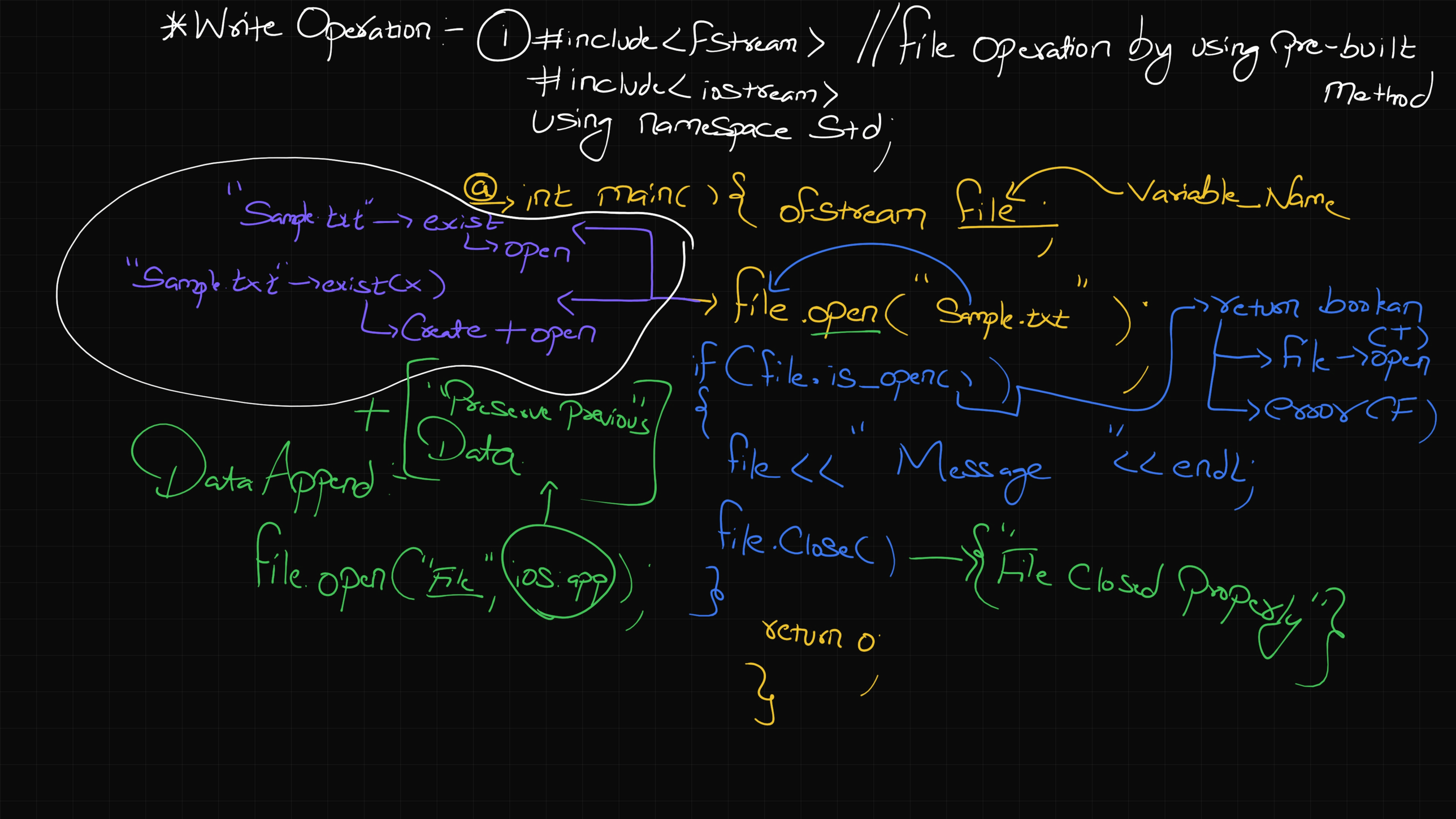
File Management

↳ "Through C++ Program/code we can also do the file-operation which includes → Read, Write, Open & Close."

→ (i) Read Operation → (Process-Flow(?))

(ii) Write Operation → (Process-Flow(?))


*Write Operation - ① #include<fstream> //file Operation by using pre-built Method
#include<iostream>
using namespace std;
② int main(){ ofstream file; Variable_Name
"Sample.txt" → exist → open
"Sample.txt" → exist(x) → Create + open
file.open("Sample.txt");
return boolean
(if) → file → open
→ error(F)
if(file.is_open())
{
file << "Message" << endl;
file.close() → {"File Closed Properly"}
}
return 0;
}
+ ["Preserve Previous Data"]
Data Append
file.open("File", ios::app);

Notes:- (i) Required Library #include<fstream>

(ii) Write Operation Pre-built Method :- ofStream var_name;

(iii) To open a file → (Pre-built method)
var_name.open("filename.txt", ios::app)
→ Preserve Past Data Don't overwrite

(iv) To identify Error → var_name.is_open()
(During file opening)
→ return Boolean
→ True (successed)
→ False (error)

(v) Write message → var_name << msg << endl;

(vi) To Close File → var_name.close()
→ use to close file properly

Read Operation :-

```
#include<fstream>
#include<iostream>
using namespace std;
int main(){
    string oneLineStatement;
    ifstream file1;
    file1.open("Sample.txt");
    if(file1.is_open()){
        while(getline(file1, oneLineStatement))
        {
            cout << oneLineStatement << endl;
        }
        File1.Close();
    }
    return 0;
}
```

-> #include<string>

Var_name

oneLineStatement

Notes:- ① #include<fstream> //to read the data.
#include<string> //to store & print the data from the targeted file.

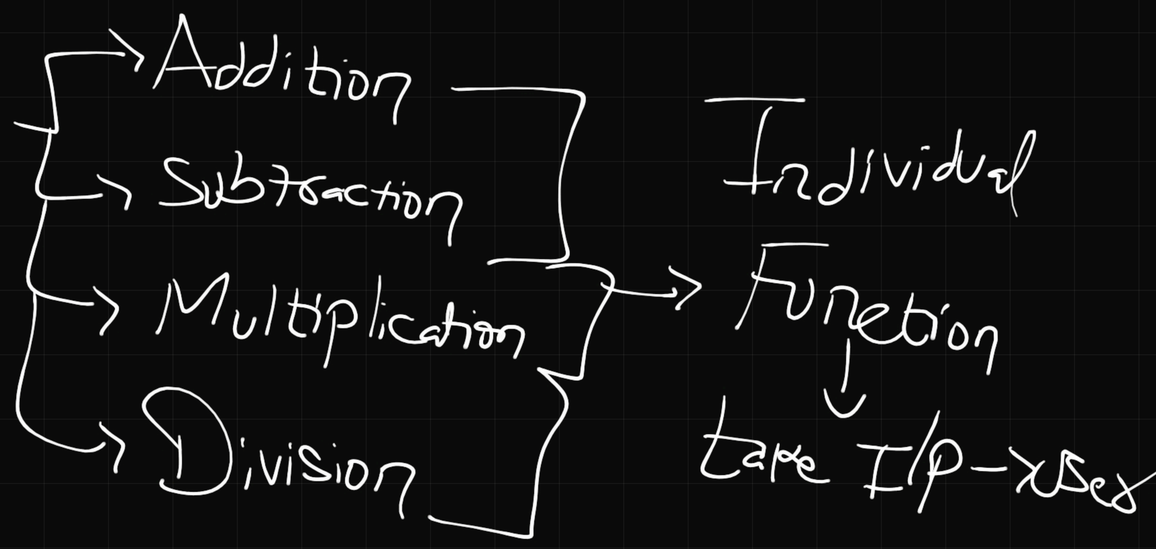
② For read operation (pre-built method) → ifstream var_name;

③ To print the Data → getline(var_name, string_var_name);

④ Close File (pre-built method) → var_name.close().

Task :- Perform write operation in "Sample.txt" and this time take the message from the user then store that message inside that file.

Task :- Create Calculator



Task :- O/p :- Choose from a given option below:

Press → 1 for Addition.

Press → 2 for Subtraction.

Press → 3 for Multiplication.

Press → 4 for Division.

Enter You're choice: ____ ← User Choice

* Use :-

↳ Switch Case Statement in You're Code.