Purpose	General Syntax	Example
Include a library	`#include <library_name>`	`#include <fstream>`
Main function start	`int main() { ... }`	`int main() { return 0; }`
Declare input file	`ifstream variable_name("filename");`	`ifstream input("data.txt");`
Declare output file	`ofstream variable_name("filename");`	`ofstream out("result.txt");`
Check file open	`if (!file.is_open()) { ... }`	`if (!input.is_open()) { ... }`
Output to screen	`cout << "message" << endl;`	`cout << "Hello" << endl;`
Return from main	`return 0;`	`return 0;`

Header Files

#include <iostream>
#include <stdio>
#include <fstream>

What is it?
These lines **import features** (called *libraries*) into your program so you can:

- Show output on screen (iostream)
- Handle files (fstream)

Open Files

ifstream inputFile("input.cpp");
ofstream outputFile("output.java");

What is it?

- ifstream = input file stream (to **read** a file)
- ofstream = output file stream (to **write** to a file)

Here we're saying:

- Open input.cpp to read
- Create or open output.java to write

If the files open correctly, we can start converting code later.

Error Checks

```
if (!inputFile.is_open()) {
   cout << "Error: input.cpp not found." << endl;
   return 1;
}
```

What is it?
This checks: **Did the input file open correctly?**

- If not, print an error.
- `return 1` means "stop the program with an error."

Same logic applies to this part:

```
if (!outputFile.is_open()) {
   cout << "Error: Cannot create output.java." << endl;
   return 1;
}
```

Return 0

```
return 0;
```

What is it?
This line means:
The program **ran successfully and ended**.