

C

-> mid-level

→

C

C++

-> mid-level

C++

→

X

* OOPS (Support)

C/CPP (Life Cycle) :- File .c/cpp —————> File .exe

Stage - 1

User-Code
#include

printf()

scanf()

int main()
{
}
return 0;

File .c/cpp

→ Compile-time Error (Syntax-error)

→ Runtime-Error (Execution → Operation)
 |
 | Mathematical Error
 |
 | Array

Pre-Processor

With actual
Code {

int main()
{
}

return
{
}

(Syntax-error)

Compiler

C Syntax-Errors

library Code

+
User
Code

Stages

Compiles (Syntax-Errors)

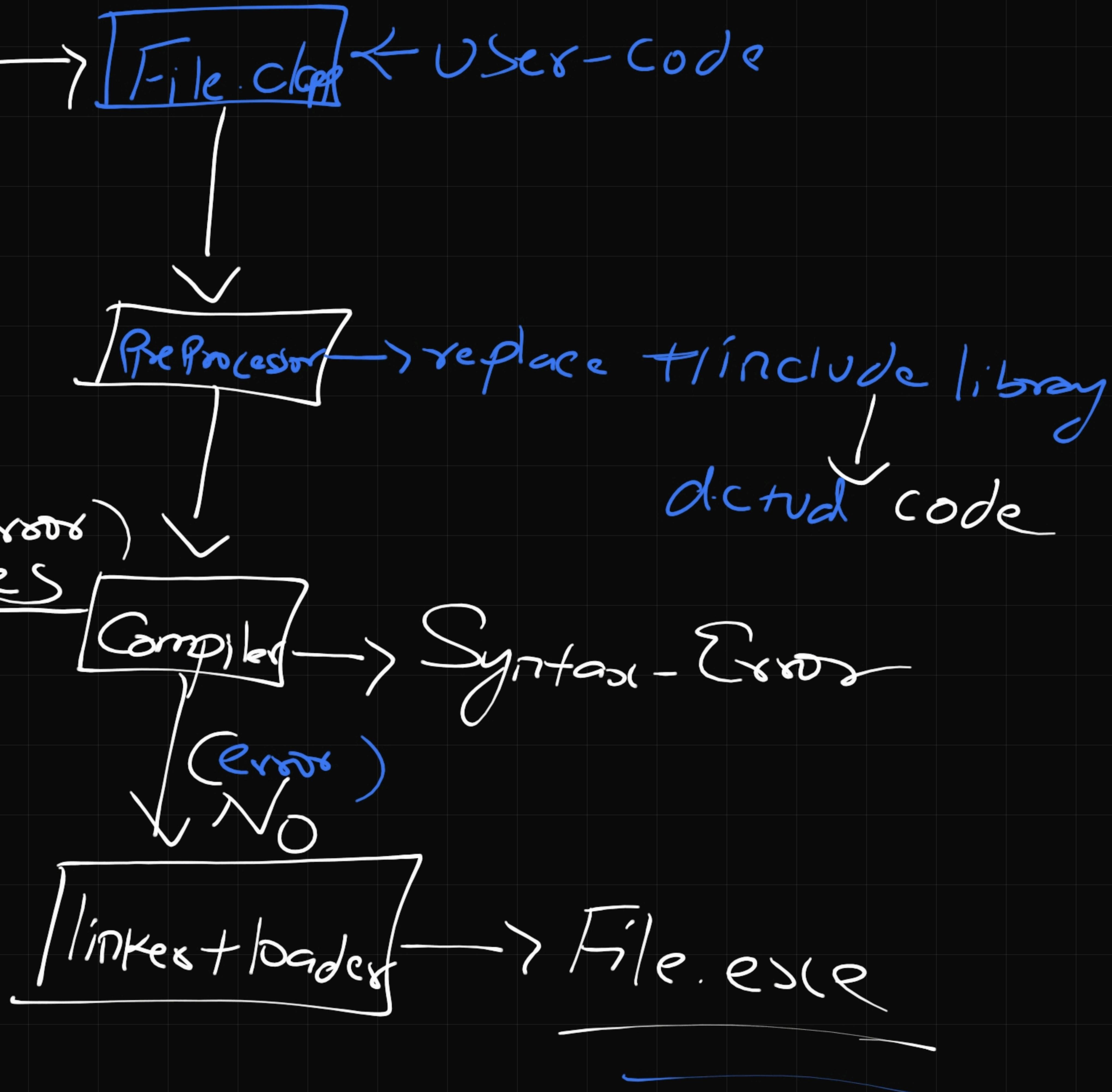
(Stage 5)

Linker + Loader ✓
(User-Code)

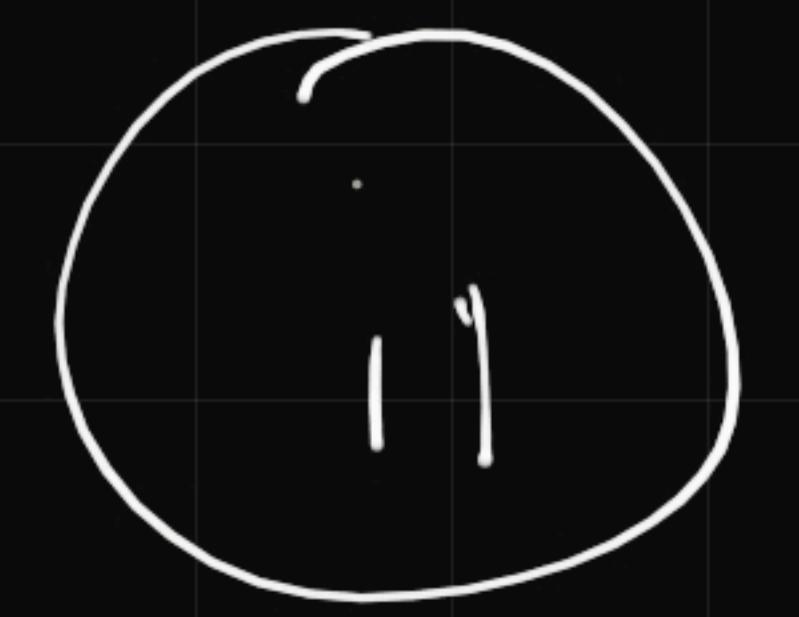
(Machine Code)

.c/.cpp

.exe



Setup - MinGW → local Disk: C → MinGW(Folder)



VSCode → C/C++

Extension

Bin



Path environment



Cmd → g++ --version

C - language

```
#include <stdio.h>
```

```
int main() {
```

FP&OP

```
    PointF <--> Scanf<--> printf  
    }  
}
```

C++

```
#include <iostream>
```

```
#include <cmath>
```

```
int main()
```

```
    PointF <--> cout << " " <<
```

```
    Scanf <--> cin >>
```

```
}
```

```
(*) printf("%s", a)
```



```
cout << msg
```



```
cout << count
```

Human efforts
↳ $\text{cin} \& \text{cout}$
Print(input
identify(data)
 $\text{cin} \uparrow \text{cout}$ ↳ printfScan

(Time-efficient)

