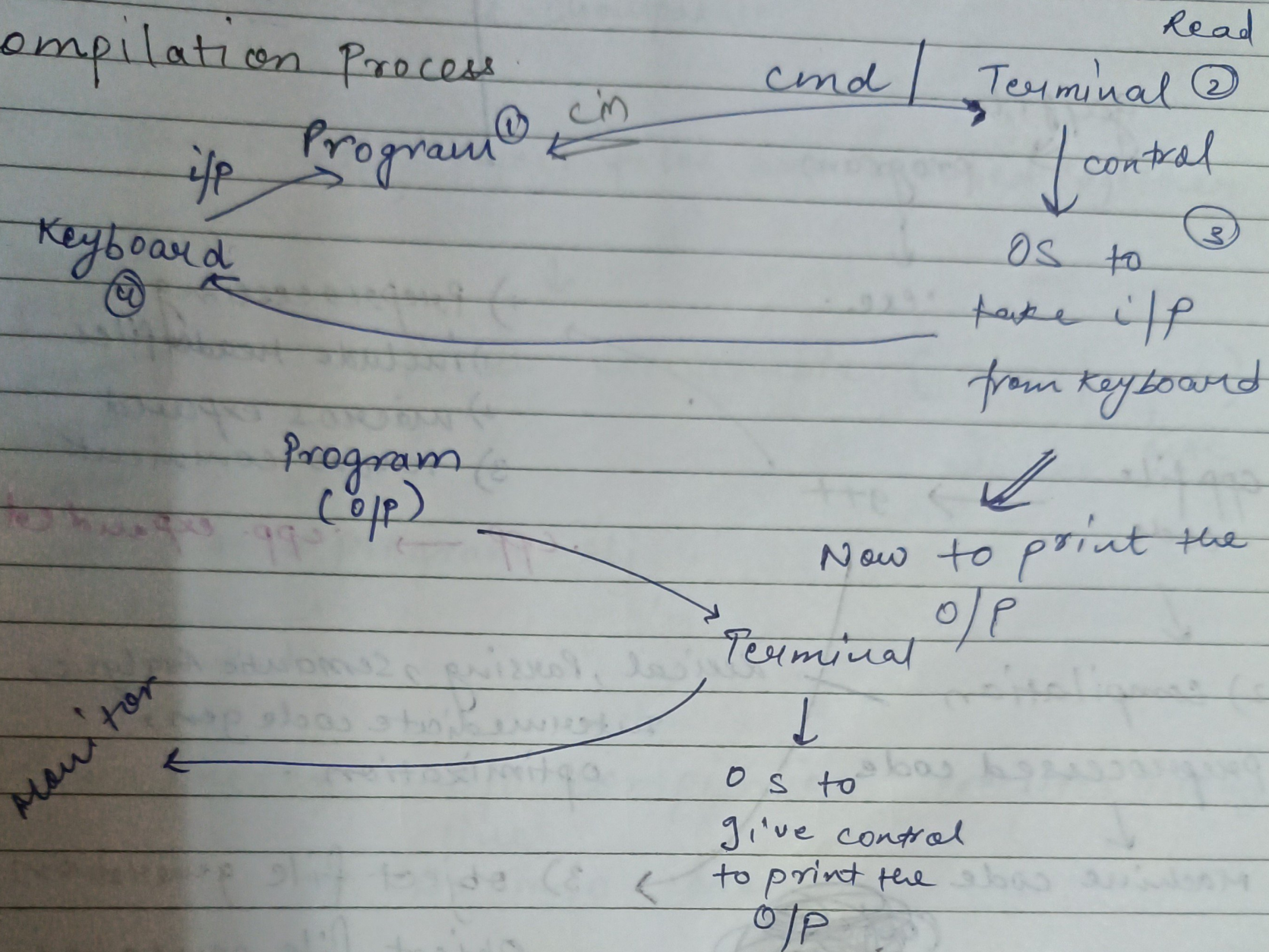


# Compilation Process



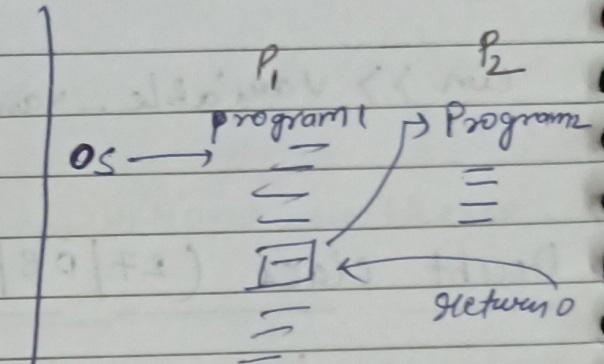
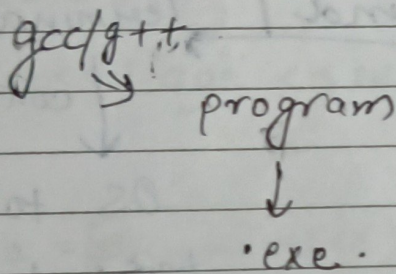
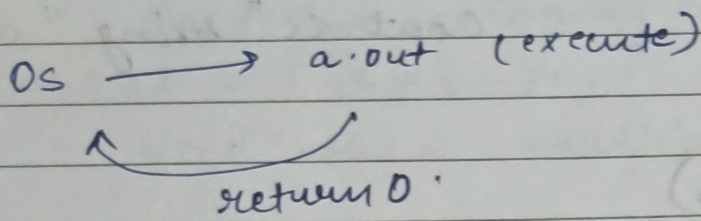
Iostream: i/p, o/p ways.



Theoretical Concepts:

•cpp → •exe → windows  
 •out → unix, ubuntu, MacOS

Return 0:



cpp file code → g++

2) compilation

preprocessed code

machine code

- 1) preprocessing
  - 1) include header files
  - 2) macros expand
  - 3) remove comments.

•cpp → •cpp expanded

lexical, parsing, semantic Analysis,  
 intermediate code gen,  
 optimization.

- 3) object file generation  
 object file contains  
 all the compiled code  
 (Assembly code)



MACROS

```
# define pi 3.14
```

```
# define AUTHOR "Champakali"
```

```
int main ()
```

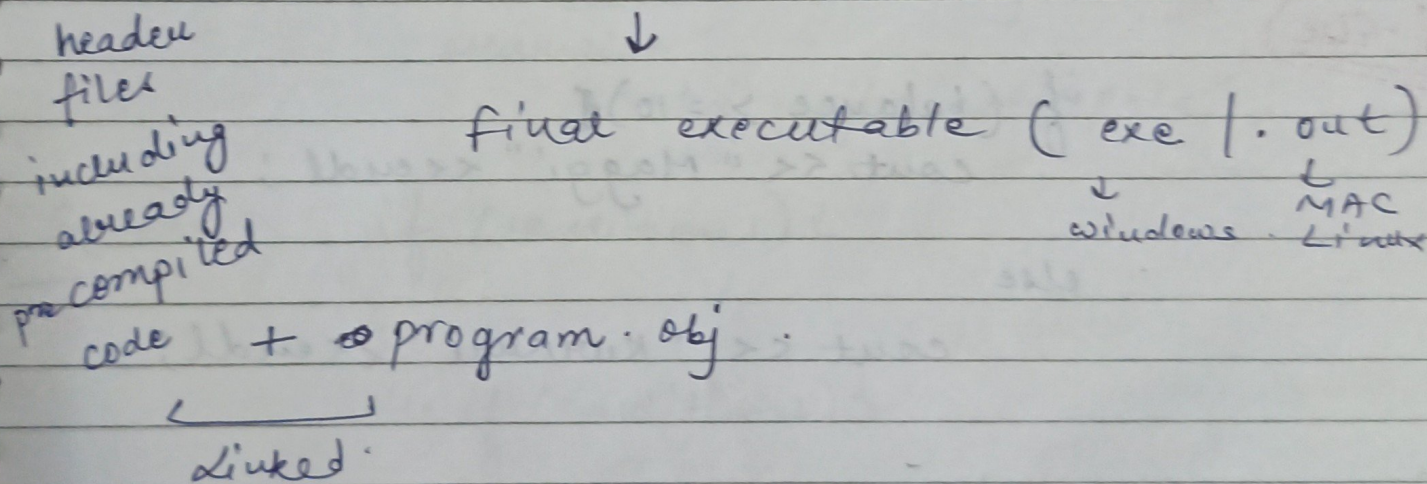
```
{
```

```
cout << "Author is " << AUTHOR << endl;
```

```
}
```

O/p → Author is Champakali

4) Linking: Diff. object files are collated together



Interpreter: w/o compilation, executes line by line

→ No m/c code

Python is an interpreted language (py interpreter)

Machine code is written in python libraries