# Makefile

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#### **Makefile**

"In software development, <u>Make</u> is a build automation tool that automatically builds executable programs and libraries from source code by reading files called Makefiles which specify how to derive the target program."

### Example

geom.c: program that gets x, y from stdin and returns the distance from the origin.

tip.C: program that gets meal price, tip percentage from stdin and returns the distance from the origin.

get\_double.c : gets double value from stdin and returns
get\_double.h

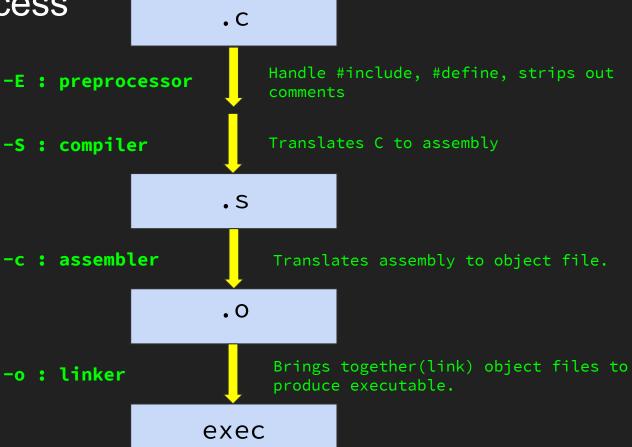
## Makefile (syntax)

target: dependencies

command

You need to use a tab (not 4 spaces) for indentation.

### Building process

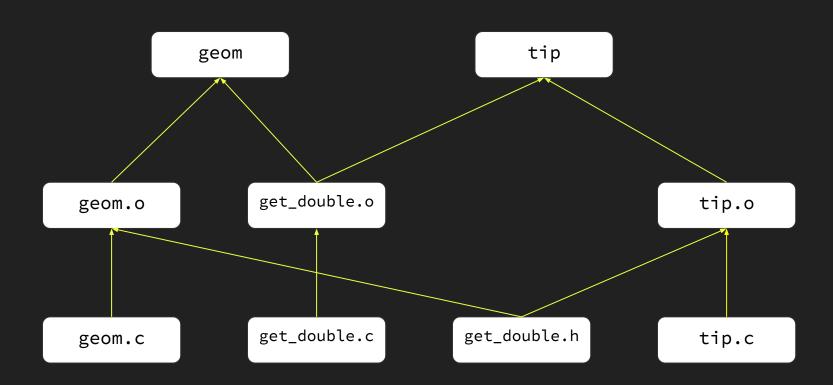


#### Demo

#### Create...

- geom.c
- tip.c
- get\_double.c
- get\_double.h

# Dependency Tree



#### Makefile

```
# Makefile
# target: dependencies
    command
all: geom tip
geom: geom.o get_double.o
  gcc geom.o get_double.o -o geom
geom.o: geom.c get_double.h
  gcc -c geom.c
get_double.o: get_double.c
  gcc -c get_double.c
tip: tip.o get_double.o
  gcc tip.o get_double.o -o tip
tip.o: tip.c get_double.h
  gcc -c tip.c
clean:
  rm -f *.o tip geom
```