Defining Dependencies in Makefile

It is very common that a final binary will be dependent on various source code and source header files. Dependencies are important because they let the **make** Known about the source for any target. Consider the following example –

```
hello: main.o factorial.o hello.o $(CC) main.o factorial.o hello.o -o hello
```

Here, we tell the **make** that hello is dependent on main.o, factorial.o, and hello.o files. Hence, whenever there is a change in any of these object files, **make** will take action.

At the same time, we need to tell the **make** how to prepare .o files. Hence we need to define those dependencies also as follows –

```
main.o: main.cpp functions.h
  $(CC) -c main.cpp

factorial.o: factorial.cpp functions.h
  $(CC) -c factorial.cpp

hello.o: hello.cpp functions.h
  $(CC) -c hello.cpp
```