***Make***

1. Go through slide 2. Discuss about compilation rules through terminal for C and C++ files. Also discuss what is the use of header files. And why there can be only one int main() in a project.
2. Through the file named “Makefile”, teach them what is the basic syntax of a makefile. What are targets, prerequisites and commands. (Everything in slide 6). Naming of Makefiles (slide 7)
3. Run “make give\_error” and “make suppress\_error”, to show how error msgs are suppressed. Explain the use of -k and -i (Slide 9)
4. Explain the use of “.PHONY” in Slide 10 and run make clean
5. Show the use of variables and -f using “make -f Make\_variables clean ; make -f Make\_variables” (Slide 11)
6. Go through Slide 12 and explain the use of wildcards
7. Go through Slide 13 and run “Makefile\_implicit”. Through this also demonstrate the use of wildcards.

***GDB***

1. We will be using an online tool to illustrate the process of debugging. <https://www.onlinegdb.com/>
2. Copy the code of [broken.cpp](https://docs.google.com/document/d/1rgVH-wcRBD7GjCFX8wlAX-IPzMu-SuP2F8rqeqlPg0c/edit?usp=share_link) into this website, select the language and C++ and debug. Now we need to type the commands in sequence to illustrate various concepts.
3. First explain Slide 16 and Slide 17.
4. break 43 (same as b 43)
5. run
6. The mistake is inside the factorial calculation function. (fact = 0 to be replaced by fact = n)
7. Illustrate the use of next and step (n, s)
8. Keep printing variables in between.
9. Once you enter the factorial function, show the use of bt, up, down, info args.
10. Let them think of the trouble. (Take a pause here)
11. Then change the code and let it run.
12. If time remains, go through the remaining slides.