Online lecture notes
Paper Name: Programming Language 'C'
Topic: Phases of Program Development

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Creating program in a language is comprised of four steps, as:

a. Write the source code and saving the program. For this the user has to press the characters from the character set of 'C' programming language. Once the source code to solve the given problem has been typed the user has to save the program. If the user is working in original 'C' Editor as TurboC2 then mouse is not allowed in the Editor. Hence the user has to press the following key combination to save the program:
Press Alt + F. Press W.
(In TurboC3 Editor Window, you may press Alt + F. Press A)

b. Once the source code of the program has been typed and saved, then next phase is to make the program error free and generate the machine code. For this the program has to be compiled. To compile the program, the user has to press the following key combination:
Press Alt + C. Press C.
Or, Press Alt + F9.
This process should be repeated until the program becomes error free and compiler is showing the message "Success: Press Any key". If this process is showing any error or warning the same should be removed. If any error is being displayed then machine code can't be generated by the compiler. If any warning is being displayed then machine code will be generated but there will be a chance that the required output may not be produced by the program.

c. Once the machine code is generated then the program can be executed. To execute the program following key combination can be pressed:
Press Alt + R. Press R.
Or Press Ctrl + F9.
Note that during the execution of the program the execution screen will be displayed and it will prompt according the message as coded in the program to perform input. The execution screen is not shown when the compiler is performing memory creation, arithmetical or logical calculations or producing output as coded in the program.

d. Checking or confirming the required output of the program is the last phase of program development. For this the user has to press the following key combination.
Press Alt + F5.

Note: Compiler and Interpreter are two translator programs that check the error in the program and reports to user if any. If no error is found in the program then they produce the machine understood code (in case of 'C' the Object Code). There is a big difference about the working of compiler and interpreter that compiler checks entire program at a time and can report many errors at the time but interpreter checks the program line by line and can report only one error at a time. Hence the compilation process is faster using the compiler but the execution process is faster while using an interpreter. 'C' uses compiler.