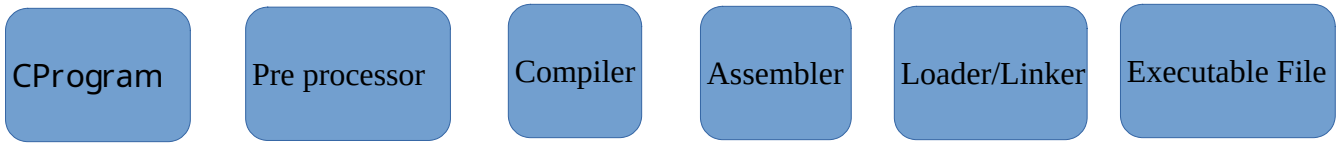
1. Explain the compiling process of C programming.
Ans :



Compiling Process of C program is as follows:
1. Firstly, lets us imagine we have hello.c program file.
2. Then hello.c is passed to the pre-processor and the preprocessor converts the source code into the expandaded source code. The extension of the expanded source code is hello.i
3. The expanded source code is passed to the compiler and the compiler converts the expanded source code into assembly code. The extension of assembly code is hello.s
4.Then the assembly code is sent to assembler, which converts the assembly code into object code.
5.After the creation of an object code, the linker creates the executable file and the loader will load the executable file for the execution.

2. Difference Between

Iteration	**Recursion**
It is a set of instructions repeatedly executed	It is a function calling itself
It involves the repetition of block of codes	It involves calling the same function again
A program is called iterative when there is a loop	A program is called recursive when it calls itself
Execution is faster as it doesn't utilize stack	Execution is slower as it utilizes stack
It uses less memory	It uses more memory

3. Why is function required in C Programming?
Ans : Function is required in C programming because it helps to break the larger blocks of codes into smaller manageable parts. It also make the code reusable and make it short and easier to read. Using function also makes it easier to debug the code if any problem arise.

4. Why is DMA used in C language?
Ans : DMA is used in C because it provide flexibility in managing memory during program execution. This capability is essential for efficiently managing the resources especially when the size of required memory cannot be determined during the time of compilation.

5.What is the use of data file in C?
Ans : Data files in C are used to store and retrieve data for various purpose such as preserving the information between program execution.

6.What is system design tools?
Ans : System design tool are software application used to plan, analyze and document the architecture and functionality of the system. These tools helps in understanding how different components of a system work together to meet specific objectives.