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CS-102

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**Static storage allocation:** This is a method for the compiler to translate a high-level language program into machine code. However, for this computer to execute the code it must reserve space for the program variables, and it must be able to translate the high-level executable statements into equivalent machine language statements. Static allocation is the simplest way to allocate memory, but since it is static, it cannot use recursion since it will be called again and again.

**Dynamic storage allocation:** This is another storage allocation method, but it differs from static storage allocation because in static memory the variables get allocated permanently, but in dynamic memory allocation variables get allocated only if the program unit gets active.

**Activation record:** contains the local environment of the recursive method at the time of and because of the call to the method.

**Tail recursion:** A recursive call that is the last action executed in the recursive method.