Object Pooling

Many Games often need to keep track of many variables and objects some examples would be particles in a particle system or bullets in the game world pretty much any 2d or 3d object rendered to the screen. Frequently used are the “new” and “delete” key words to create and destroy objects in many games which can lead to many problems such as Memory leaks and Memory allocation and deallocation are made very slow which is where object pooling excels in solving the issue involved with the program. So what is an Object pool? An object pool is where a collection of objects are recycled by being used and unused then reused for the next time they are needed without having to be created or removed using “new” and “delete” during runtime. The memory is allocated then freed after the program has been unloaded this helps keeping memory organized and reduces memory fragmentation. When using object pooling using “isActive” will allow the programmer to allocate the next object in the memory pool where the variable “isActive” is set to false. This method is easy to implement but is also make finding a free item slow