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This workshop built on the previous workshop from the dynamic memory allocation and the management to prevent leaks. There was also the introduction of the ctime and chrono libraries to measure time. Additionally with the workshop working with external files for reading and writing was reviewed and the use of strings instead of c strings was used. This made the management of the memory simpler with the object handling much of that functionality with some extra. One key concept that was introduced with the second part of the workshop is the concept of lvalues and rvalues in relation to the rule of 5. The lvalue is associated with an addressed value, typically a variable. The rvalue is the literal value which is temporary. A reference can only take a lvalue however by using && this will make the argument take a rvalue making the variable temporary. With this, extra memory destructing the allocation is avoided. This brings upon the concept of rule of 5 expanded from rule of 3: destructor, copy constructor and copy assignment, the move constructor and assignment are added. This is shown by the old string being empty after the movement.