C++ Technical Notes

* Variable instantiated (object created and assigned a memory address) at runtime (when program is ran)
  + Instantiated object called instance
* Variable types need to be known at compile-time, type cannot be changed
* Copy initialization:
  + Int width = 5;
* Direct initialization:
  + Int width(5);
* Uniform (Brace) initialization 🡪 C++ 11:
  + Int width{5};
  + Int width{}; //uniform initialization to value 0
  + Enables disallowing “narrowing” conversions:
  + Int width{4.5}; 🡪 compiler throws warning/error
  + Int width = 4.5; or int width(4.5); 🡪 drops fractional component, becomes width = 4.
* \n preferred over ‘std::endl’ since it doesn’t flush output again