

Mathematical Algorithms in C++17 Solutions

std::clamp()

- Briefly describe std::clamp
 - std::clamp returns a value between its second and third arguments
 - If first argument < second argument, return second argument
 - If first argument > third argument, return third argument
 - Else return first argument
- Write a simple program which uses std::clamp

clamp()

- Which predicate does `std::clamp` use by default?
 - The argument's `<` operator
- Write a simple program which uses `std::clamp` and uses a different predicate

std::gcd()

- Briefly describe std::gcd
 - std::gcd returns the greatest common denominator (greatest common divisor) of its arguments
- Write a simple program which uses std::gcd

std::lcm()

- Briefly describe std::lcm
 - std::lcm returns the lowest common multiple of its arguments
- Write a simple program which uses std::lcm

std::sample()

- Briefly describe std::sample
 - std::sample selects a given number of elements at random from a sequence
- Write a simple program which uses std::sample