

Random Number Algorithms

Solutions

- What does `shuffle()` do?
 - `shuffle()` randomly rearranges the elements
- What arguments does `shuffle()` take?
 - The iterator range of the elements and a random engine instance
- Write a simple program that uses `shuffle()`

- Describe what `bernoulli_distribution` does
 - `bernoulli_distribution` converts a sequence of numbers into booleans (true or false)
- Write a simple program which uses `bernoulli_distribution`
- Re-implement the program in traditional C++, using `rand()` without any algorithms

- Suggest some applications where `shuffle()` and the `bernoulli_distribution` could be useful
 - Card games (shuffling the pack)
 - Music players (shuffling the playlist)
 - Game strategy (making a 50-50 decision)
 - Game animation (making characters move more realistically)