

Programming Exercise 6.8

The Game Of War, v.1.0

Purpose. Write a simple program from scratch that uses if-logic. The game is played between the computer and a human player.

Supplemental. Read about “randomizing” in www.rdb3.com/cpp/exercises/Gaming.supplemental.pdf.

Requirements. Write the program `war1.cpp`, based on the card game “war” (www.pagat.com/war/war.html), following this algorithm:

Algorithm.

1. Call `srand`
2. Compute and store the computer's card's value (2-14) using the random number generator
3. Output the computer's card's value, outputting 2-10 as that value, but output 11 as Jack, 12 as Queen, 13 as King, and 14 as Ace
4. Get and store the computer's card's suit (0-3) using the random number generator
5. Output the computer's card's suit, but output 0 as Spades, 1 as Diamonds, 2 as Hearts, and 3 as Clubs
6. Get and store the human's card's value (2-14) using the random number generator
7. Output the human's card's value, outputting 2-10 as that value, but output 11 as Jack, 12 as Queen, 13 as King, and 14 as Ace
8. Get and store the human's card's suit (0-3) using the random number generator
9. Output the human's card's suit, but output 0 as Spades, 1 as Diamonds, 2 as Hearts, and 3 as Clubs
10. If the computer's card's value is LESS than the human's card's value, output "Human wins!"
11. If the computer's card's value is EQUAL TO the human's card's value, output "It's a tie."
12. If the computer's card's value is GREATER than the human's card's value, output "Computer wins!"

Example.

Computer's card is a Jack of Spades

Human's card is a 10 of Clubs

Computer wins!