

One-Day Assignment 3 – algorithmic solution

Coconut Splat

One-Day Assignment 3 – Pseudocode (English Description)

We use a custom class, “Hand” to represent a hand, or hands in the case of folder hands. It contains the player which it belongs to (stored as an int), as well as the hand type it represents (can be stored as an int, but for clarity’s sake we shall use a String instead)

We use a linked list of Hands when solving this problem, which we shall name as just “list”

One-Day Assignment 3 – Pseudocode (English Description)

Initialise the list with `num_player` instances of hands. All hands are of type “folded”, but the hands belong to different players, from player 1 at the front of the list, to player `num_player` at the back of the list.

Simulate the counting off of hands by moving the hand at the front of the list to the back of the list (`num_syllables - 1`) times. Afterwards, remove the hand at the front of the list and store it as a variable `curr_hand`.

Look at the type of hand represented by `curr_hand`.

One-Day Assignment 3 – Pseudocode (English Description)

If it is “folded”, then add two instances of hands of type “fist” to the front of the list, with the same player number as curr_hand.

If it is “fist”, then add a new hand of type “palm” to the back of the list, with the same player number as curr_hand.

If it is “palm”, then nothing needs to be added to the list.

Repeat this simulation as many times as necessary until there is only one hand left. Output the player whom that hand belongs to.