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Assignment 1

Data Structures and Algorithms

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# Task:

Your task is to develop a circular linked-list based simulation of the Josephus problem. The simulation will be text based.

The user should be presented with a text-based menu asking him to enter the total number of people (n), starting point (i), direction (clockwise/anti-clockwise) and number to be skipped (k). Your program then must populate a circular linked list with n nodes where data of each node should be their position in the circle (starting from 1), and their name. The names should be read randomly from the list of names provided (names.txt) and no names should be repeated.

Your program should then work iteratively printing the remaining persons after each iteration (round of killing). After the last iteration only the node with the winning initial position should be left in the list.

# Answer:

Write how you wrote the initial skeleton code here!

# Problem:

Make this heading to define every major problem that you encountered!

# Solution:

Write the solution to the problem here with a picture of the relating code!

# Output:

Show final output of the entire code here with pictures and a little explanation.