**Implementation of Josephus Problem using Circular LL**

// code:

#include <stdio.h>

#include <stdlib.h>

// Josephus problem using circular linked list

struct node {

int id;

struct node \*next;

};

struct node \*start, \*ptr, \*newNode;

int main() {

int i, n, k, count;

printf("Enter the number of player : ");

scanf("%d", &n);

printf("Enter value of k : ");

scanf("%d", &k);

start = malloc(sizeof(struct node));

start->id = 1;

ptr = start;

// creating list of size n

for (i = 2 ; i <= n ; i++) {

newNode = malloc(sizeof(struct node));

ptr->next = newNode;

newNode->id = i;

newNode->next = start;

ptr = newNode;

}

// traversing the list and deleting every kth node

for (count = n ; count>1 ; count--) {

for (i = 0 ; i < k-1 ; i++) {

ptr = ptr->next;

}

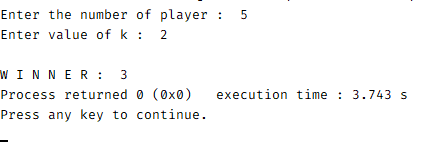
ptr->next = ptr->next->next;

}

printf("\nW I N N E R : %d", ptr->id);

}

// output

.

