#include <stdio.h>

#include <string.h>

#include <stdlib.h>

#include <time.h>

// Fungsi untuk menukar nilai string

void swapStrings(char \*str1, char \*str2) {

    char temp[50];

    strcpy(temp, str1);

    strcpy(str1, str2);

    strcpy(str2, temp);

}

// Fungsi untuk menentukan pemenang berdasarkan skor

void determineWinner(char \*team1, int score1, int score2, char \*team2, char \*winner, char \*loser) {

    if (score1 > score2) {

        strcpy(winner, team1);

        strcpy(loser, team2);

    } else if (score2 > score1) {

        strcpy(winner, team2);

        strcpy(loser, team1);

    } else {

        printf("Skor akhir seri %d-%d. Melanjutkan ke adu penalti.\n", score1, score2);

        int penalty\_score1, penalty\_score2;

        printf("Skor adu penalti %s: ", team1);

        scanf("%d", &penalty\_score1);

        printf("Skor adu penalti %s: ", team2);

        scanf("%d", &penalty\_score2);

        if (penalty\_score1 > penalty\_score2) {

            strcpy(winner, team1);

            strcpy(loser, team2);

        } else {

            strcpy(winner, team2);

            strcpy(loser, team1);

        }

    }

}

int main() {

    char timA[50], timB[50], timC[50], timD[50];

    char winner1[50], winner2[50], loser1[50], loser2[50];

    char champion[50], runnerUp[50], thirdPlace[50], fourthPlace[50];

    int score1\_first\_half, score1\_second\_half, score2\_first\_half, score2\_second\_half;

    int total\_score1, total\_score2;

    int choice;

    // Input nama tim

    printf("\n=====Welcome to the Fourfeo Ruble cup 2024 =====\n");

    printf("\nSilahkan masukan nama team yang bertanding\n");

    printf("Masukkan nama Tim A: ");

    scanf("%s", timA);

    printf("Masukkan nama Tim B: ");

    scanf("%s", timB);

    printf("Masukkan nama Tim C: ");

    scanf("%s", timC);

    printf("Masukkan nama Tim D: ");

    scanf("%s", timD);

    // Tampilkan opsi untuk memilih atau mengetikkan urutan acak

    printf("\nPilih urutan acak tim-tim untuk pertandingan semi-final:\n");

    printf("1. Acak urutan secara otomatis\n");

    printf("2. Ketik urutan acak manual\n");

    printf("Pilihan Anda: ");

    scanf("%d", &choice);

    // Array untuk menampung nama tim

    char teams[4][50];

    strcpy(teams[0], timA);

    strcpy(teams[1], timB);

    strcpy(teams[2], timC);

    strcpy(teams[3], timD);

    // Pilihan untuk acak urutan atau manual

    switch (choice) {

        case 1:

            // Acak urutan tim menggunakan metode Fisher-Yates shuffle

            srand(time(NULL));

            for (int i = 3; i > 0; i--) {

                int j = rand() % (i + 1);

                if (i != j) {

                    swapStrings(teams[i], teams[j]);

                }

            }

            break;

        case 2:

            // Input urutan tim secara manual

            printf("Masukkan urutan acak tim-tim (misal: 1 3 2 4): ");

            int order[4];

            for (int i = 0; i < 4; i++) {

                scanf("%d", &order[i]);

            }

            // Buat array tim sementara untuk menyimpan urutan baru

            char temp\_teams[4][50];

            for (int i = 0; i < 4; i++) {

                strcpy(temp\_teams[i], teams[order[i] - 1]);

            }

            // Salin kembali ke array asli

            for (int i = 0; i < 4; i++) {

                strcpy(teams[i], temp\_teams[i]);

            }

            break;

        default:

            printf("Pilihan tidak valid.\n");

            return 1;

    }

    // Pertandingan Semi Final 1: Tim teams[0] vs teams[1]

    printf("\nPertandingan 1: %s vs %s\n", teams[0], teams[1]);

    printf("Skor Babak Pertama %s: ", teams[0]);

    scanf("%d", &score1\_first\_half);

    printf("Skor Babak Kedua %s: ", teams[0]);

    scanf("%d", &score1\_second\_half);

    printf("Skor Babak Pertama %s: ", teams[1]);

    scanf("%d", &score2\_first\_half);

    printf("Skor Babak Kedua %s: ", teams[1]);

    scanf("%d", &score2\_second\_half);

    total\_score1 = score1\_first\_half + score1\_second\_half;

    total\_score2 = score2\_first\_half + score2\_second\_half;

    determineWinner(teams[0], total\_score1, total\_score2, teams[1], winner1, loser1);

    // Pertandingan Semi Final 2: Tim teams[2] vs teams[3]

    printf("\nPertandingan 2: %s vs %s\n", teams[2], teams[3]);

    printf("Skor Babak Pertama %s: ", teams[2]);

    scanf("%d", &score1\_first\_half);

    printf("Skor Babak Kedua %s: ", teams[2]);

    scanf("%d", &score1\_second\_half);

    printf("Skor Babak Pertama %s: ", teams[3]);

    scanf("%d", &score2\_first\_half);

    printf("Skor Babak Kedua %s: ", teams[3]);

    scanf("%d", &score2\_second\_half);

    total\_score1 = score1\_first\_half + score1\_second\_half;

    total\_score2 = score2\_first\_half + score2\_second\_half;

    determineWinner(teams[2], total\_score1, total\_score2, teams[3], winner2, loser2);

    // Pertandingan Final: Winner1 vs Winner2

    printf("\nFinal: %s vs %s\n", winner1, winner2);

    printf("Skor Babak Pertama %s: ", winner1);

    scanf("%d", &score1\_first\_half);

    printf("Skor Babak Kedua %s: ", winner1);

    scanf("%d", &score1\_second\_half);

    printf("Skor Babak Pertama %s: ", winner2);

    scanf("%d", &score2\_first\_half);

    printf("Skor Babak Kedua %s: ", winner2);

    scanf("%d", &score2\_second\_half);

    total\_score1 = score1\_first\_half + score1\_second\_half;

    total\_score2 = score2\_first\_half + score2\_second\_half;

    determineWinner(winner1, total\_score1, total\_score2, winner2, champion, runnerUp);

    // Perebutan Tempat Ketiga: Loser1 vs Loser2

    printf("\nPerebutan Tempat Ketiga: %s vs %s\n", loser1, loser2);

    printf("Skor Babak Pertama %s: ", loser1);

    scanf("%d", &score1\_first\_half);

    printf("Skor Babak Kedua %s: ", loser1);

    scanf("%d", &score1\_second\_half);

    printf("Skor Babak Pertama %s: ", loser2);

    scanf("%d", &score2\_first\_half);

    printf("Skor Babak Kedua %s: ", loser2);

    scanf("%d", &score2\_second\_half);

    total\_score1 = score1\_first\_half + score1\_second\_half;

    total\_score2 = score2\_first\_half + score2\_second\_half;

    determineWinner(loser1, total\_score1, total\_score2, loser2, thirdPlace, fourthPlace);

    // Cetak hasil turnamen

    printf("\n===== Fourfeo Ruble 2024 =====\n\n");

    printf("Congratulations for the Champions\n\n");

    printf("Juara ke-1 : %s\n", champion);

    printf("Juara ke-2 : %s\n", runnerUp);

    printf("Juara ke-3 : %s\n", thirdPlace);

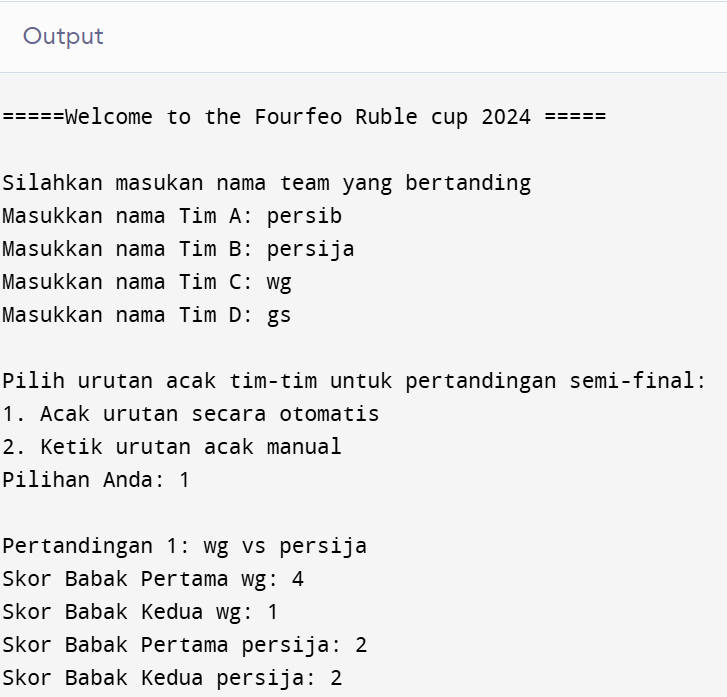
    printf("Juara ke-4 : %s\n", fourthPlace);

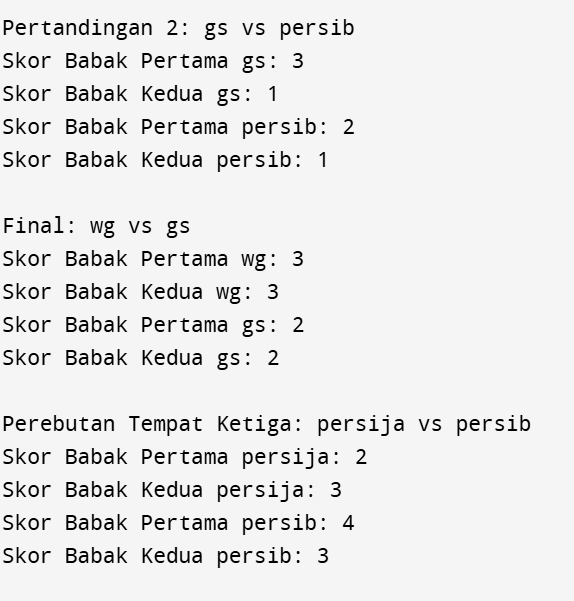
    printf("\n======= Junjung Tinggi Sportivitas =======\n");

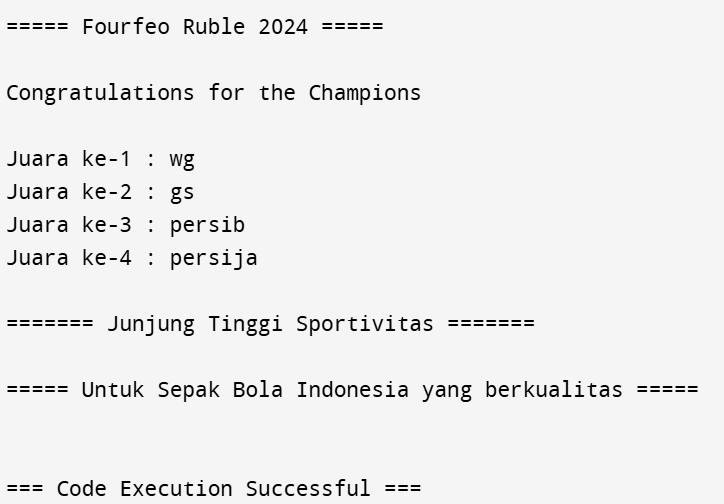
    printf("\n===== Untuk Sepak Bola Indonesia yang berkualitas =====\n");

    return 0;

}



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