CS-2 Lab-1

Install a C++ compiler.

Complete the following assignment. Submit a word document or pdf to Canvas.

Download this file and copy your source code after the problem statement.

Copy the screen shot of the result after the source code.

A white paper with black text

Description automatically generated

COPY OF SOURCE CODE GOES HERE

#include <iostream>

using namespace std;

int const NUM\_OF\_PLAYERS = 12;

struct Player

{

    string playerName;

    int playerNumber;

    int playerScore;

};

Player playerList[NUM\_OF\_PLAYERS];

void enterPlayerData();

void displayPlayerData();

void showHighestScorer();

void showTotalScore();

void enterPlayerData(){

    for(int i = 0; i < NUM\_OF\_PLAYERS; i++){

        cout << "Enter player " << (i + 1) << "'s name: ";

        cin >> playerList[i].playerName;

        cout << "Enter player " << (i + 1) << "'s number: ";

        cin >> playerList[i].playerNumber;

        while (playerList[i].playerNumber < 0)

            {

                cout << "Enter player " << (i + 1) << "'s number(Enter only positive digits): ";

                cin >> playerList[i].playerNumber;

            }

        cout << "Enter player " << (i + 1) << "'s score: ";

        cin >> playerList[i].playerScore;

        while (playerList[i].playerScore < 0)

        {

            cout << "Enter player " << (i + 1) << "'s score(Enter only positive digits): ";

            cin >> playerList[i].playerScore;

        }

    }

    }

void displayPlayerData(){

    cout << "Player Data:\n";

    for(int i = 0; i < NUM\_OF\_PLAYERS; i++){

        cout << "Name: " << playerList[i].playerName

             << "\tNumber: " << playerList[i].playerNumber

             << "\tScore: " << playerList[i].playerScore << endl;

    }

}

void showHighestScorer(){

    int highestScoreIndex = 0;

    for(int i = 1; i < NUM\_OF\_PLAYERS; i++){

        if(playerList[i].playerScore > playerList[highestScoreIndex].playerScore){

            highestScoreIndex = i;

        }

    }

    cout << "Highest Scorer:\n";

    cout << "Name: " << playerList[highestScoreIndex].playerName

         << "\tNumber: " << playerList[highestScoreIndex].playerNumber

         << "\tScore: " << playerList[highestScoreIndex].playerScore << endl;

}

void showTotalScore(){

    int totalScore = 0;

    for(int i = 0; i < NUM\_OF\_PLAYERS; i++){

        totalScore += playerList[i].playerScore;

    }

    cout << "Total Score of all players: " << totalScore << endl;

}

int main(){

    enterPlayerData();

    displayPlayerData();

    showHighestScorer();

    showTotalScore();

        return 0;

}

SCREEN SHOT OF RESULTS GOES HERE



