

CHINIOT ISLAMIA COLLEGE

Paper 1

1st Quarterly Test

compter science - O3

Total Marks: 100

Name: _____

Section: _____

calculator is allowed

Q1 .

11 The one-dimensional (1D) array `TeamNames[]` contains the names of teams in a sports league. The two-dimensional (2D) array `TeamPoints[]` contains the points awarded for each match. The position of each team's data in the two arrays is the same. For example, the team stored at index 10 in `TeamNames[]` and `TeamPoints[]` is the same.

The variable `LeagueSize` contains the number of teams in the league. The variable `MatchNo` contains the number of matches played. All teams have played the same number of matches.

The arrays and variables have already been set up and the data stored.

Each match can be played at home or away. Points are recorded for the match results of each team with the following values:

- 3 – away win
- 2 – home win
- 1 – drawn match
- 0 – lost match.

Write a program that meets the following requirements:

- write a program that meets the following requirements:
 - calculates the total points for all matches played for each team
 - counts the total number of away wins, home wins, drawn matches and lost matches for each team
 - outputs for each team:
 - name
 - total points
 - total number of away wins, home wins, drawn matches and lost matches
 - finds and outputs the name of the team with the highest total points
 - finds and outputs the name of the team with the lowest total points.

You must use pseudocode or program code **and** add comments to explain how your code works.

You do **not** need to declare any arrays, variables or constants; you may assume that this has already been done.

All inputs and outputs must contain suitable messages.

You do not need to initialise the data in the arrays `TeamName[]` and `TeamPoints[]` or the variables `LeagueSize` and `MatchNo`

- The one-dimensional (1D) array `TeamName[]` contains the names of teams in a sports league. The two-dimensional (2D) array `TeamPoints[]` contains the points awarded for each match. The position of each team's data in the two arrays is the

same. For example, the team stored at index 10 in `TeamName[]` and `TeamPoints[]` is the same. The variable `LeagueSize` contains the number of teams in the league. The variable `MatchNo` contains the number of matches played. All teams have played the same number of matches. The arrays and variables have already been set up and the data stored. Each match can be played at home or away. Points are recorded for the match results of each team with the following values: • 3 – away win • 2 – home win • 1 – drawn match • 0 – lost match. Write a program that meets the following requirements: • calculates the total points for all matches played for each team • counts the total number of away wins, home wins, drawn matches and lost matches for each team • outputs for each team: – name – total points – total number of away wins, home wins, drawn matches and lost matches • finds and outputs the name of the team with the highest total points • finds and outputs the name of the team with the lowest total points. You must use pseudocode or program code and add comments to explain how your code works. You do not need to declare any arrays, variables or constants; you may assume that this has already been done. All inputs and outputs must contain suitable messages. You do not need to initialise the data in the arrays `TeamName[]` and `TeamPoints[]` or the variables `LeagueSize` and `MatchNo`




