

Question

(30)

Write a C Program to create a project '**Cricket Score Board**'.

Read the following instructions carefully, understand the functions and then generate the required output.

Attempt any three of the given 5 choices.

The output should print a welcome message to the users and then ask the user for any action:

```
*****WELCOME*****
***CRICKET SCORE BOARD***
Please enter your choice:
1. Last over runs data
2. Average runs for the last over
3. Details of the players
4. Details of the match
5. Predict runs for the team
6. Exit
Your choice: _
```

You must create a main() function which prints the above message.

You must also create 5 different functions for each of the choices.

Detailed explanation of the functions is as follows:

1. for '**Last over runs data**,

the user is prompted to add details for every ball of the last over and after all inputs are done, the output should be printed in such a way that it looks like a table. Assume that there was no wide ball or no ball.

The user is then asked to input if there was a wicket or not.

Example:

```
...
Your choice: 1
*****Last Over Runs Data*****

Please enter details of the last over:
Enter runs for ball 1:0
Enter runs for ball 2:2
Enter runs for ball 3:2
Enter runs for ball 4:4
Enter runs for ball 5:1
Enter runs for ball 6:6

Was there any wicket(y/n)? y

*****Okay! Printing*****
```

Ball	Runs
1	0
2	2
3	2
4	4
5	1
6	6

Wicket? Yes

2. for '**Average runs of the last over**',

ask the user to input runs for all the balls of the last over and then calculate the average runs. Assume there are no wide balls or no balls.

Example:

```
...
Your choice: 2
*****Average runs of the last over*****

Please enter details of the last over:
Enter runs for ball 1:0
Enter runs for ball 2:2
Enter runs for ball 3:2
Enter runs for ball 4:4
Enter runs for ball 5:1
Enter runs for ball 6:6

*****Calculating average...*****
Average runs for the last over: 2.5
```

3. for '**Details of players**',

Ask the user to input details of the players in both the teams and then print it in a table format as follows:

```
Team_1_name
S.no  |  Player Name
1     |  abc
2     |  def
3     |  ghi
....
Team_2_name
S.no  |  Player Name
1     |  mno
2     |  rst
```

....

Here team_1_name and team_2_name is also to be provided by the user.

4. for '**Details of match**',

input necessary details such as the date, time, venue of the match, type of the match (t20, WC, one-day etc.), team names, team captains, toss winner, the weather and temperature and then print the data in a paragraph form by using the above data.

- Use different phrases like 'It is a warm day today for the match' if the temperature is above 20 degrees centigrade, or 'It is quite a hot day for the players today' if temperature is greater than 27 degrees.
- Also mention the season(according to India) according to the input date.

Example if the date is 12th December 2021, Print: "This Winter climate is quite pleasant for an exciting match Today!" or if it is 6th May, "Aah! The summer breeze is very dominant it seems like".

The output should be like:

...

Your choice: 4

*****Details of the match*****

Please enter details of the match:

Date: 5 December 2021

Time: 20.00

Venue: Motera Stadium, Ahmedabad

Type: T20

Temperature: 19

Team name 1: CSK

Team Captain 1: MS Dhoni

Team name 2: RCB

Team Captain 2: Virat Kohli

Toss winner: CSK

Their choice: Bowl

*****Details*****

Hello Viewers! We are here at Motera Stadium, Ahmedabad to enjoy the T20 match between CSK and RCB! This gentle Winter breeze is anticipating the result of today's match. It is late evening right now. The temperature looks as if it is going to be quite pleasant for the players.

The team captains Ms Dhoni and Virat Kohli arrived for the toss and...

CSK has won the toss, and they have chosen to bowl.

5. for '**Predict runs for the team**',

This is a basic prediction system to be generated by you.

Ask the user to input the team's last 10 match's data of whether they won the match or not. And then use that to predict if they will win today's match or not:

If the team has won 6 matches in the past and lost 4 matches,

Use the winning matches as +1 and losing matches as -1. If the total is 1 or higher, prediction is maybe they might win, if 0, The match might be draw and if less than 0, prediction is lose.

```
...
Your choice: 5
*****Predict runs for the team*****
Enter team name: CSK
Enter Details for the last 10 matches (1 for win, -1 for lose and 0 if draw):
Match 1: 1
Match 2: 1
Match 3: -1
Match 4: 0
Match 5: 1
Match 6: -1
Match 7: 1
Match 8: 1
Match 9: -1
Match 10: -1

Total Points: 1
Prediction: CSK might win today's match
```