

**Ques:1**

The network receives information about the two competing teams and the conditions of the match and is supposed to predict **how many goals each team will score**.

Let us say that every team consists of 20 players. You are providing the following input data to the network:

1. The skill level of every player on each of the two teams. Skill is rated by a group of soccer reporters on a scale from 0 (“is unable to kick the ball”) to 10 (“world class player”).

TEAM1		TEAM2	
Player	Skill	Player	Skill
1	10	1	7
2	8	2	8
3	9	3	6
4	6	4	9
5	7	5	4
6	4	6	10
7	5	7	3
8	8	8	8
9	9	9	5
10	10	10	6
11	5	11	3
12	3	12	6
13	5	13	7
14	7	14	6
15	8	15	9
16	3	16	8
17	7	17	4
18	9	18	7
19	10	19	9
20	8	20	10

2. The number of matches that each team has played during the last two weeks. There are never more than seven matches in that period of time.

Team	No of Matches
1	8
2	10

3. Goals record of both teams in past two weeks matches.
4. The statistics of former matches between the same two teams within the past two weeks (e.g., Team A won 30% of the matches, Team B 45%, and 25% of the matches were tied).

You want to build and train a backpropagation network that, based on this information, is able to predict the number of goals each team will score.