Assignment 3

Challa Akshay Santoshi-CS21BTECH11012

CBSE Class 9 Statistics

Excercise: 14.3 Question: 6

The runs scored by two teams A and B on the first 60 balls in a cricket match are given below. Represent the data of both the teams on the same graph by frequency polygons.

Number of balls	Team A	Team B
1 - 6	2	5
7 - 12	1	6
13 - 18	8	2
19 - 24	9	10
25 - 30	4	5
31 - 36	5	6
37 - 42	6	3
43 - 48	10	4
49 - 54	6	8
55 - 60	2	10

TABLE 0: Data representing the runs scored

Solution:

Number of balls	Team A	Team B
0.5 - 6.5	2	5
6.5 - 12.5	1	6
12.5 - 18.5	8	2
18.5 - 24.5	9	10
24.5 - 30.5	4	5
30.5 - 36.5	5	6
36.5 - 42.5	6	3
42.5 - 48.5	10	4
48.5 - 54.5	6	8
54.5 - 60.5	2	10

TABLE 0: Modified Data Table

To make the class intervals continuous we add 0.5 to each upper class limit and subtract 0.5 from each lower class limits.

The frequency polygon which is used to compare the sets of data of Team A and Team B can be displayed using a cummulative frequency distribution.
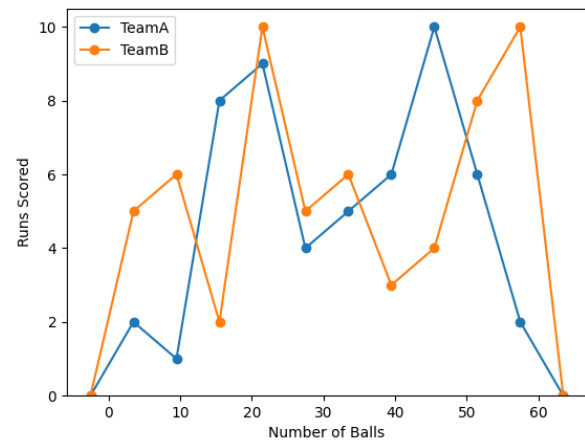

Fig. 0: Frequency Polygon representing the data of both teams