

# AI1110 Assignment-3

Rajulapati Bhargava Ram (cs21btech11052)

**Abstract**—This document contains the solution for Assignment 3 (NCERT Class 9 statistics Exercise 14.2 Q.9)

**14.2 Q9 :** A company manufactures car batteries of a particular type. The lives (in years) of 40 such batteries were recorded as follows:

2.6	3.0	3.7	3.2	2.2	4.1	3.5	4.5
3.5	2.3	3.2	3.4	3.8	3.2	4.6	3.7
2.5	4.4	3.4	3.3	2.9	3.0	4.3	2.8
3.5	3.2	3.9	3.2	3.2	3.1	3.7	3.4
4.6	3.8	3.2	2.6	3.5	4.2	2.9	3.6

TABLE I

Construct a grouped frequency distribution table for this data, using class intervals of size 0.5 starting from interval 2-2.5.

**Solution:**

In the question we are required to construct a grouped frequency distribution table such that class size is 0.5 starting from 2-2.5 (not including 2.5) till 4.5-5 as the data does not cross 5 years.

The grouped frequency distribution table is given below:

Battery Life (in years)	Tally Marks	Frequency
2-2.5		2
2.5-3		6
3-3.5		14
3.5-4		11
4-4.5		4
4.5-5		3

TABLE II  
FREQUENCY DISTRIBUTION TABLE