

# Assignment 3

Pradeep Mundlik (AI21BTECH11022)

## 1 QUESTION-

Find the mean salary of 60 workers of factory from following table:

Salary (in Rs.)	Number of Workers
3000	16
4000	12
5000	10
6000	8
7000	6
8000	4
9000	3
10000	1
<b>Total</b>	60

## 2 ANSWER-

See below table, Here,

Salary ( $x_i$ )	No. of Workers ( $f_i$ )	$f_i \times x_i$
3000	16	48000
4000	12	48000
5000	10	50000
6000	8	48000
7000	6	42000
8000	4	32000
9000	3	27000
10000	1	10000
<b>Total</b>	$\sum f_i = 60$	$\sum f_i \times x_i = 305000$

$x_i$  = salary,

$f_i$  = frequency associated with  $x_i$  salary i.e number of workers with salary  $x_i$ ,

So, the mean  $\bar{x}$  is

$$\bar{x} = \frac{\sum(f_i \times x_i)}{\sum(f_i)} \quad (2.1)$$

$$\Rightarrow \bar{x} = \frac{305000}{60} \quad (2.2)$$

$$\Rightarrow \bar{x} = 5083.33 \quad (2.3)$$

Therefore, the mean of salaries is Rs.5083.33/- .