



SNJB'S Late Sau K B Jain College of Engineering, Chandwad
Department of Electronics & Telecommunication Engineering

Academic Year: 2023-24	Class: BE
Semester: I	Date:31/7/2023

Title of Innovation method/activity: Experiential Learning

Activity:Use of BE class data for prediction of Height/Weight with Linear Regression.

Name of Faculty: Prof. Kokate M D

Course: Deep Learning

Objective: To create an ambience of active learning engagement to understand the application of knowledge with live case study.

Topic Covered through Activity: Linear Regression Model Algorithm

Benefits:

i.Active Engagement: Experiential learning keeps learners actively engaged in the learning process.

ii.Application of Knowledge: Experiential learning allows learners to apply theoretical knowledge to real-life situations.

iii.Personalized Learning: adds its own experience

iv.Increased Motivation and Engagement: Being actively involved in such learning activities, can increase learners' motivation and engagement.

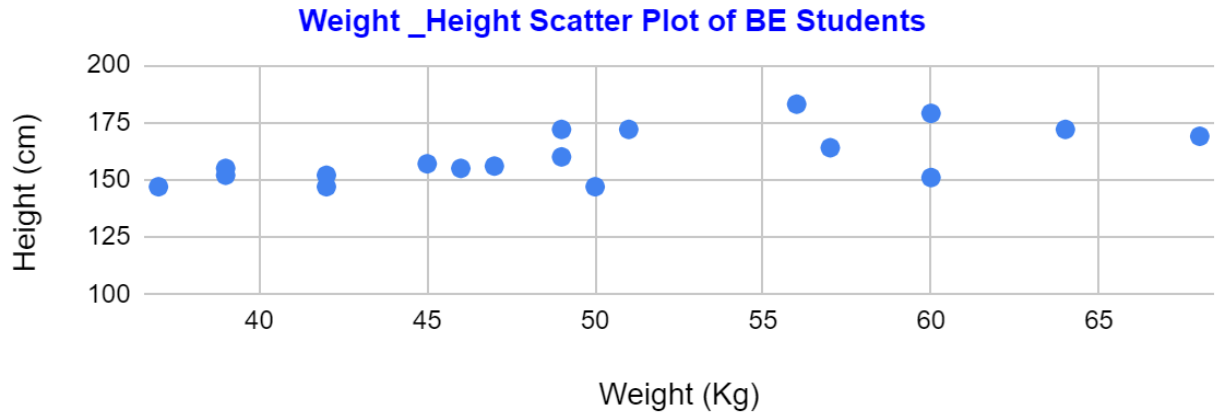
v.Preparation for the Future: Experiential learning helps prepare learners for the challenges they may encounter in the real world.

The Method (Activity):

- a. Upon completion of the Linear Regression topic of Unit 1, we started discussion on using real time applications with such ML algorithms.
- b. Through a discussion, we evolved with why not to create our **Prediction Model** with our own data set and use it for prediction of other absent student's parameters such as weight/Height etc.
- c. We prepared following table of present students with weight and height

BE(E&Tc) 2023-24				
WEIGHT AND HEIGHT Linear REGRESSION MODEL (STAT)				
Sr of Students (8 M/10F) (*Names not disclosed)	weight kg X	height cm Y	X^2	XY
1*	56	183	3136	10248
2	60	179	3600	10740
3	49	160	2401	7840
4	64	172	4096	11008
5	57	164	3249	9348
6	51	172	2601	8772
7	49	172	2401	8428
8	68	169	4624	11492
9	45	157	2025	7065
10	46	155	2116	7130
11	42	147	1764	6174
12	47	156	2209	7332
13	42	152	1764	6384
14	39	155	1521	6045
15	39	152	1521	5928
16	60	151	3600	9060
17	37	147	1369	5439
18	50	147	2500	7350
sum	901	2890	46497	145783

- d. We tried to establish the weight and height relationship of present students during training phase

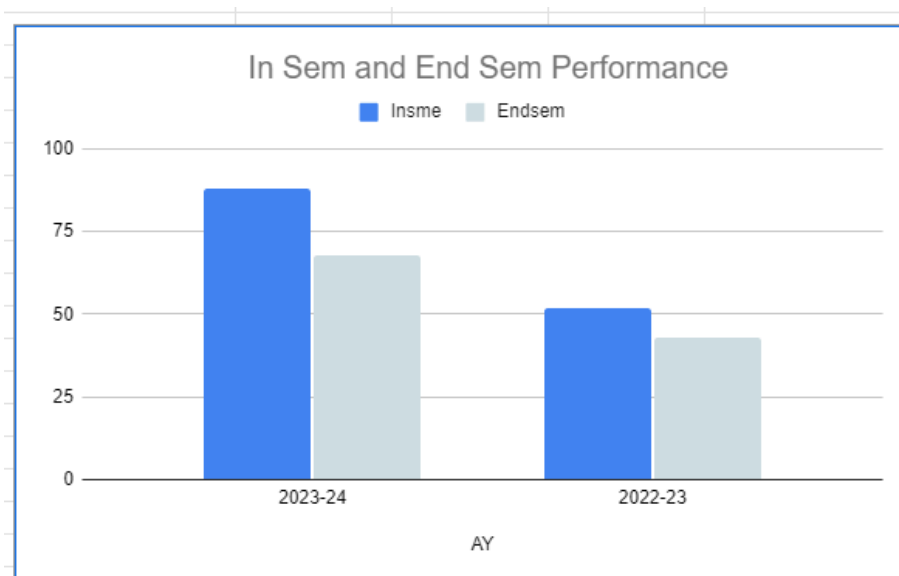


e. Regression Model evolved:

Relation : $y=3.1353x+3.6157$
TRAINING:18 STUDENT
TESTING: 3 STUDENTS
ACCURACY: 80% PLUS

f. We used this Linear Regression model to predict absent students Height or weight in the next session. Students enjoyed predicting their weight or Height.

II) Impact: University Results improved



For review and critique contact: e-mail address of faculty and HOD: kokate.mdcoe@snjb.org

OR hodentccoe@snjb.org

Subject In charge

Prof. Kokate M.D.

Module Coordinator

Prof. Baste Swati B

HoD

Prof. Dr. Agrawal R K