

# **Assignment 3**

## **Machine Learning (CS564)**

***Date:- 13-April-2024***

***Deadline:-21-April-2024***

### **Instructions:**

1. Coding must be done using Python, and you can use already available clustering algorithm libraries.
2. All the assignments should be completed and uploaded before the deadline.
3. Markings will be based on the correctness and soundness of the outputs. Marks will be deducted in case of plagiarism.
4. Proper indentation and appropriate comments are mandatory.
5. You should zip all the required files and name the zip file as roll\_no.zip, eg. 1501cs11.zip.
6. Upload your assignment (the zip file) in the moodle platform

### **Assignment:**

Amazon\_cloths sells clothes online. Customers come into the store, have meetings with a personal stylist, then they can go home and order either on a mobile app or website for the clothes they want.

The company is trying to decide whether to focus its efforts on its mobile app experience or its website. Apply Linear Regression to find out the below-mentioned questions;

1. Find out the intercept
2. Find out the slope
3. Find out the coefficient by using features: Avg. Session Length, Time on App, Time on Website Length of Membership and (  $y$  = Yearly Amount Spent)
4. Find out on which feature the company should invest more.
5. Plot the test prediction