Assignment 2: Flowchart Creation - Design a flowchart that outlines the logic for a user login process. It should include conditional paths for successful and unsuccessful login attempts, and a loop that allows a user three attempts before locking the account.

**FLOWCHART ;-**

A diagram of a login

Description automatically generated

**Psuedocode :-**

1. We define the correct student ID and password.
2. The program prompts the user to enter their student ID and password.
3. It compares the input with the correct values.
4. If the input matches, it displays a success message and exits the loop.
5. Otherwise, it informs the user of the remaining attempts and increments the attempt count.
6. If the user exceeds three unsuccessful attempts, the account is locked.

**Algorithm :-**

1. Initialize attempts\_left to 3
2. Initialize is\_logged\_in to false
3. Repeat until either is\_logged\_in is true or attempts\_left is 0:

a. Ask the user to enter their username

b. Ask the user to enter their password

c. If the entered username and password match the stored credentials:

i. set login is true.

ii. Display "Login successful! Welcome, [username]!"

iii. Exit the loop

d. Else:

i. Decrease attempts\_left by 1

ii. If attempts\_left is greater than 0: - Display "Incorrect username or password. Please try again. Attempts left: [attempts\_left]"

iii. Otherwise: - Display "You've exceeded the maximum number of login attempts. Your account is locked." - End the algorithm

1. If is\_logged\_in is still false:
   * Display "Sorry, your account is locked."