MAWLANA BHASHANI SCIENCE AND TECHNOLOGY UNIVERSITY

SANTOSH, TANGAIL-1902

DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY

Lab Report

Lab Report No: 02

Lab Report on: Encapsulation ensuring data security and integrity.

Course Title: Software Engineering and Project Management Lab

Course Code: ICT-3108

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Lab report- 2 :

Encapsulation is an OOP concept that hides data and protect them from direct access. It ensures data security by making variable private inside a class.

Outside classes can not change data directly. Data can be changed only using public methods. These methods check the values before saving them. These prevents wrong on harmful data from entering the system. Encapsulation also keeps data consistent and correct. If invalied data is given, the method rejects it. In blank system, this is very important for safety. Therefore Encapsulation ensures both data and security.

Java Code :

```java
class - Account {
    private String account Number;
    private double balance;
    public void set Account Number (String accNo) {
        if (accNo! = Null && !accNo. in empty()) {
            accountNumber = accNo; {
        else {
            System.out. println ("Invalied acant
                            number");
        }
    {

    public void setInitialBalance(double amount)
    { if (amount >=0) {
        balance = amount ;
    {
    else {
        System.out. println ("Balance
            cannot be negative);
    {
{
```