



भारतीय सूचना प्रौद्योगिकी संस्थान गुवाहाटी  
**INDIAN INSTITUTE OF INFORMATION TECHNOLOGY GUWAHATI**  
**IT Workshop I, B.Tech 3rd Semester**

**Instructions**

1. The deadline to submit is 25th September 2023.

**Assignment 6a**  
**Total Marks: 30**

1. Write a Java program to implement the addition operation. Please see below for a sample run. (10)

Command Prompt	Output
Add 3 9	12
Add 3 4 6 7 9	29
Add 3	Error: Add requires at least two numbers
Add	Error: No numbers to add

2. Consider a Banking Application System and implement the following in Java. The variable/method names indicate their usual meanings. The methods (deposit, withdraw, etc.) will be invoked for one object at a time, and this will be identified by the account number, which is passed as a parameter or can also be taken from the user. (20)

**Class:** Account

**Attributes:**

accountNumber: int  
accountType: String  
serviceBranchIFSC: String  
minimumBalance: float  
availableBalance: float  
customerID: int  
customerName: String  
totalAccountCreated: int, static

**Constructor:** Implement a constructor to initialize the attributes of the student.

**Methods:**

setDetails ()  
getDetails (accoutNo: int): String  
updateDetails(accoutNo: int): void

getBalance (accoutNo: int): float  
deposit (accoutNo: int, amount: float)  
withdraw (accoutNo: int, amount: float)  
totalAccount(): int, static

- (a) Create an array of objects for the Account class.
- (b) Design a menu-driven interface for the user. A user will choose an option from (1). Update Details, (2). Get Details, (3). Deposit, (4). Withdraw, (5). Exit etc. Based on the option entered by the user, an appropriate operation should be performed by calling the appropriate method of the class
- (c) Write a method to display the total number of accounts created for a point in time. Put this option in the user menu.

Note:

1. You can assume additional instance variables, additional methods, static fields, etc. if needed / to make the application more realistic.