

 <p>SASTRA DEEMED TO BE UNIVERSITY (U/S 3 OF THE UGC ACT, 1956) THINK MERIT · THINK TRANSPARENCY · THINK SASTRA</p>	<p>School of Computing First CIA Test – October 2021 Course Code: CSE 208 Course Name: JAVA PROGRAMMING Duration: 60 minutes Max Marks: 20</p>
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A banking system is looking for automated solution for managing deposit and withdrawal. The system would currently support feature of Savings Account, however, it may have more account types in future. Develop a Java program which serves this system following below guidelines.

Create an interface – Account Interface with abstract **methods** – deposit and withdraw.

Create abstract class – Account with attributes account id, customer id.

Create child class – SavingAccount from this abstract class with attribute balance. Initialize the instance variables using a constructor. This class will implement withdraw and deposit methods where amount to be deposited should be added to the balance and amount to be withdrawn should be deducted from the balance.

deposit – This method will take account id and deposit amount. Amount will be deposited into specific account with that id. Method will return new balance if account with that id exists, else returns -1.

withdraw – This method will take account id and withdraw amount. It will return -1 if account with specific id does not exist. Else, it will check if withdraw amount is less than or equal to existing balance. If yes, perform withdrawal and return new balance.

Declare a class BankDemo which has main method. Test deposit and withdraw methods by creating five instances of SavingsAccount objects. The program should be menu driven containing the options: (Use switch case to get the options)

1. Deposit
2. withdraw
3. display
4. exit