# Department of Computing

**CS-213: Advanced Programming**

**Class: BSCS 7AB**

# Lab Quiz # 01

# Task

Write a program of bank management system to manage the account information using inheritance concept.

Create a class “Bank Account” with the customer\_name, account\_number etc. as member variables. Create the derived classes for two types of accounts i.e. current and saving. The derived classes will update the balance and handle the deposit and withdraw cases. Customers should be able to get updated balance after deposit and withdrawal amounts.

**Answer:**

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| Solution |
| Task Code:  class BankAccount  {  private int balance  private int number;  String owner;  public BankAccount(String owner, int initial\_balance)  {  this.owner = owner;  balance = initial\_balance;  }  public class current extends BankAccount{  public void deposit(int amount)  {  balance += amount;  }  public boolean withdraw(int amount)  {  if( amount > balance )  return false; // unsuccessful  balance -= amount; // successful  return true;  }  }  public class savings extends BankAccount{  public boolean withdraw(int amount)  {  if( amount > balance )  return false; // unsuccessful  balance -= amount; // successful  return true;  }    public void deposit(int amount)  {  balance += amount;  }  }  public void statement()  {  System.out.println("Balance in account number " + number + " is " + balance);  }  /\*\*  Close the account.  \*\*/  public void close()  {  balance = 0;  }  /\*\*  BankAccount test program.  \*\*/    public test{  public static void main(String args[])  {  // declare accounts  BankAccount a, b, c;  // create accounts  a = new BankAccount("Alice", "991", 15000);  b = new BankAccount("Wei", "995", 200000);  c = new BankAccount("Helga", "998", 100000);  // use accounts  b.deposit(5000);  c.deposit(50000);  if( !a.withdraw(5000) )  {  System.out.println("Insufficient funds in " + a.number);  }  if( !a.withdraw(11000) )  {  System.out.println("Insufficient funds in " + a.number);  }  // print statements  a.statement();  b.statement();  c.statement();  }  }  }  Task Output Screenshot: |

### Deliverables

Compile a single word document by filling in the solution part and submit this Word file on LMS.