# 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:  /\*  \* To change this license header, choose License Headers in Project Properties.  \* To change this template file, choose Tools | Templates  \* and open the template in the editor.  \*/  /\*\*  \*  \* @author domain1  \*/  public class Main {  public static void main(String []args){    }  }  import java.util.Scanner;  /\*  \* To change this license header, choose License Headers in Project Properties.  \* To change this template file, choose Tools | Templates  \* and open the template in the editor.  \*/  /\*\*  \*  \* @author domain1  \*/  public class BankAccount {    //Variables  private String customer\_name = "";  private int account\_number ;  private int amount;  Scanner input = new Scanner(System.in);    //Getter Setter  public String getCustomer\_name() {  return customer\_name;  }  public int getAmount() {  return amount;  }  public void setAmount(int amount) {  this.amount = amount;  }  public void setCustomer\_name(String customer\_name) {  this.customer\_name = customer\_name;  }  public int getAccount\_number() {  return account\_number;  }  public void setAccount\_number(int account\_number) {  this.account\_number = account\_number;  }    //Methods  public void deposit(){  System.out.println("How much do you want to deposit?");  int value = input.nextInt();  setAmount(value + getAmount());  System.out.println("Deposit Successfully");  }    public void getBalance(){  System.out.println("Your Current Balance is: " + getAmount() + "Rupees");  }    }  /\*  \* To change this license header, choose License Headers in Project Properties.  \* To change this template file, choose Tools | Templates  \* and open the template in the editor.  \*/  /\*\*  \*  \* @author domain1  \*/  public class CurrentAccount extends BankAccount {  public void withdraw(){  System.out.println("Enter amount you want to withdraw:");  int withdrawAmount = input.nextInt();  if((withdrawAmount >= 0) && (withdrawAmount <= getAmount() ) ){  setAmount(getAmount() - withdrawAmount);  getBalance();  }  else if(withdrawAmount > getAmount()){  System.out.println("You dont have that much money");  }  else{  System.out.println("Invalid Amount");  }  }  }  /\*  \* To change this license header, choose License Headers in Project Properties.  \* To change this template file, choose Tools | Templates  \* and open the template in the editor.  \*/  /\*\*  \*  \* @author domain1  \*/  public class SavingsAccount extends BankAccount {  private int limit = 10000;    public void withdraw(){  System.out.println("Enter amount you want to withdraw:");  int withdrawAmount = input.nextInt();  if((withdrawAmount < 0) || (limit < withdrawAmount)){  System.out.println("Invalid Amount");  }  else{  limit -= withdrawAmount;  }  if((withdrawAmount >= 0) && (withdrawAmount <= getAmount() ) && (limit >=0) ){  setAmount(getAmount() - withdrawAmount);  getBalance();  }  else if(withdrawAmount > getAmount()){  System.out.println("You dont have that much money");  }  else{  System.out.println("Invalid Amount");  }  }  }  Task Output Screenshot: |

### Deliverables

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