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Roll no.: 63

Core Java Assignment

Day 1:

Que 1.

Code:

**class** bankAccount{

**public** **int** accountNo;

**public** **double** accountBalance;

**public** String accountPassword;

**static** String *bankName* = "State Bank of India";

bankAccount(**int** accountNo, **double** accountBalance, String accountPassword){

**this**.accountNo = accountNo;

**this**.accountBalance = accountBalance;

**this**.accountPassword = accountPassword;

}

**void** display() {

System.***out***.println("\nAccount details are:");

System.***out***.println("password: " + accountPassword);

System.***out***.println("Acc\_No: " + accountNo);

System.***out***.println("Balance: " + accountBalance);

System.***out***.println();

}

}

**class** savingsAccount **extends** bankAccount{

**private** **int** minBalance;

savingsAccount(**int** accountNo, **double** accountBalance, String accountPassword, **int** minBalance) {

**super**(accountNo, accountBalance, accountPassword);

**this**.minBalance = minBalance;

}

**void** display() {

System.***out***.println("password: " + accountPassword);

System.***out***.println("Acc\_No: " + accountNo);

System.***out***.println("Balance: " + accountBalance);

System.***out***.println("minBalance: " + minBalance);

System.***out***.println();

}

}

**class** currentAccount **extends** bankAccount{

**private** **int** overDraftLimitAmount;

currentAccount(**int** accountNo, **double** accountBalance, String accountPassword, **int** overDraftLimitAmount) {

**super**(accountNo, accountBalance, accountPassword);

**this**.overDraftLimitAmount = overDraftLimitAmount;

}

**int** minBalance;

**void** display() {

System.***out***.println("password: " + accountPassword);

System.***out***.println("Acc\_No: " + accountNo);

System.***out***.println("Balance: " + accountBalance);

System.***out***.println("overDraftLimitAmount: " + overDraftLimitAmount);

System.***out***.println();

}

}

**class** Que\_one {

**public** **static** **void** main(String[]args) {

bankAccount ba = **new** bankAccount(101, 10000, "Tejas");

System.***out***.println("Bank Account Details:");

ba.display();

savingsAccount sa = **new** savingsAccount(101, 10000, "Tejas",1000);

System.***out***.println("Saving account details: ");

sa.display();

currentAccount ca = **new** currentAccount(101, 10000, "Tejas", 50000);

System.***out***.println("Current account details: ");

ca.display();

}

}

Output:

Bank Account Details:

Account details are:

password: Tejas

Acc\_No: 101

Balance: 10000.0

Saving account details:

password: Tejas

Acc\_No: 101

Balance: 10000.0

minBalance: 1000

Current account details:

password: Tejas

Acc\_No: 101

Balance: 10000.0

overDraftLimitAmount: 50000

Que 2.

Code:

**abstract** **class** bankAccount{

**public** **int** accountNo;

**public** **double** accountBalance;

**public** String accountPassword;

**static** String *bankName* = "State Bank of India";

bankAccount(**int** accountNo, **double** accountBalance, String accountPassword){

**this**.accountNo = accountNo;

**this**.accountBalance = accountBalance;

**this**.accountPassword = accountPassword;

}

**abstract** **void** withdraw(**double** amount);

**void** display() {

System.***out***.println("\nAccount details are:");

System.***out***.println("password: " + accountPassword);

System.***out***.println("Acc\_No: " + accountNo);

System.***out***.println("Balance: " + accountBalance);

System.***out***.println("Thank you for choosing us as your bank...!\n");

}

}

**class** savingsAccount **extends** bankAccount{

**private** **int** minBalance;

savingsAccount(**int** accountNo, **double** accountBalance, String accountPassword, **int** minBalance) {

**super**(accountNo, accountBalance, accountPassword);

**this**.minBalance = minBalance;

}

**void** display() {

System.***out***.println("password: " + accountPassword);

System.***out***.println("Acc\_No: " + accountNo);

System.***out***.println("Balance: " + accountBalance);

System.***out***.println("minBalance: " + minBalance);

}

@Override

**void** withdraw(**double** amount) {

System.***out***.println();

System.***out***.println("Withdrawing Rs500 from savings account...");

System.***out***.println("Balance Left:"+ (accountBalance - amount));

System.***out***.println();

}

}

**class** currentAccount **extends** bankAccount{

**private** **int** overDraftLimitAmount;

currentAccount(**int** accountNo, **double** accountBalance, String accountPassword, **int** overDraftLimitAmount) {

**super**(accountNo, accountBalance, accountPassword);

**this**.overDraftLimitAmount = overDraftLimitAmount;

}

**int** minBalance;

**void** display() {

System.***out***.println("password: " + accountPassword);

System.***out***.println("Acc\_No: " + accountNo);

System.***out***.println("Balance: " + accountBalance);

System.***out***.println("overDraftLimitAmount: " + overDraftLimitAmount);

}

@Override

**void** withdraw(**double** amount) {

System.***out***.println();

System.***out***.println("Withdrawing Rs500 from current account...");

System.***out***.println("overDraftLimitAmount left:"+ (overDraftLimitAmount - amount));

System.***out***.println();

}

}

**class** Que\_two\_day2 {

**public** **static** **void** main(String[]args) {

System.***out***.println("Bank Account Details:");

System.***out***.println();

savingsAccount sa = **new** savingsAccount(101, 10000, "Tejas",1000);

System.***out***.println("Saving account details: ");

sa.display();

sa.withdraw(500);

currentAccount ca = **new** currentAccount(101, 10000, "Tejas", 50000);

System.***out***.println("Current account details: ");

ca.display();

ca.withdraw(500);

}

}

Output:

Bank Account Details:

Saving account details:

password: Tejas

Acc\_No: 101

Balance: 10000.0

minBalance: 1000

Withdrawing Rs500 from savings account...

Balance Left:9500.0

Current account details:

password: Tejas

Acc\_No: 101

Balance: 10000.0

overDraftLimitAmount: 50000

Withdrawing Rs500 from current account...

overDraftLimitAmount left:49500.0

Que 3.

Code:

**class** SbiAtm **implements** ATM\_Interface{

**public** **void** changePassword(**int** accountNumber,String oldPassword,String newPassword) {

System.***out***.println("Changing password of account:"+accountNumber);

System.***out***.println("Old Password was: "+oldPassword);

System.***out***.println("New Password is: "+newPassword);

System.***out***.println();

}

**public** **void** checkBalance(**int** accountNumber, **int** bal) {

System.***out***.println("Welcome to ICICI BAnk ATM");

System.***out***.println();

System.***out***.println("Balance for account "+accountNumber+" is: "+bal);

}

**public** **void** withdraw(**int** accountNumber,**double** amount) {

System.***out***.println("Withdrawing balance from account:"+accountNumber);

System.***out***.println("Amount debited is: " +amount);

}

}

**class** IciciAtm **implements** ATM\_Interface{

**public** **void** withdraw(**int** accountNumber,**double** amount) {

System.***out***.println("Withdrawing balance from account:"+accountNumber);

System.***out***.println("Amount debited is: " +amount);

}

**public** **void** changePassword(**int** accountNumber,String oldPassword,String newPassword) {

System.***out***.println("Changing password of account:"+accountNumber);

System.***out***.println("Old Password was: "+oldPassword);

System.***out***.println("New Password is: "+newPassword);

}

**public** **void** checkBalance(**int** accountNumber, **int** bal) {

System.***out***.println("Welcome to ICICI BAnk ATM");

System.***out***.println();

System.***out***.println("Balance for account "+accountNumber+" is: "+bal);

}

}

**class** Que\_three{

**public** **static** **void** main(String[] args) {

ATM\_Interface atm = **new** SbiAtm();

atm.checkBalance(101, 1000);

atm.withdraw(101, 200);

atm.changePassword(101, "Tejas", "Shreyas");

ATM\_Interface atm1 = **new** IciciAtm();

atm1.checkBalance(102, 2000);

atm1.withdraw(102, 500);

atm1.changePassword(102, "Nitin", "Sunetra");

}

}

Output:

Welcome to ICICI BAnk ATM

Balance for account 101 is: 1000

Withdrawing balance from account:101

Amount debited is: 200.0

Changing password of account:101

Old Password was: Tejas

New Password is: Shreyas

Welcome to ICICI BAnk ATM

Balance for account 102 is: 2000

Withdrawing balance from account:102

Amount debited is: 500.0

Changing password of account:102

Old Password was: Nitin

New Password is: Sunetra