

Name of Experiment: Write a test application named account test that demonstrate the account capabilities creating 5 objects without constructors.

Introduction:- We have to design a class representing a bank account and we also have to write a test application to demonstrate the capabilities of the account class without using constructors.

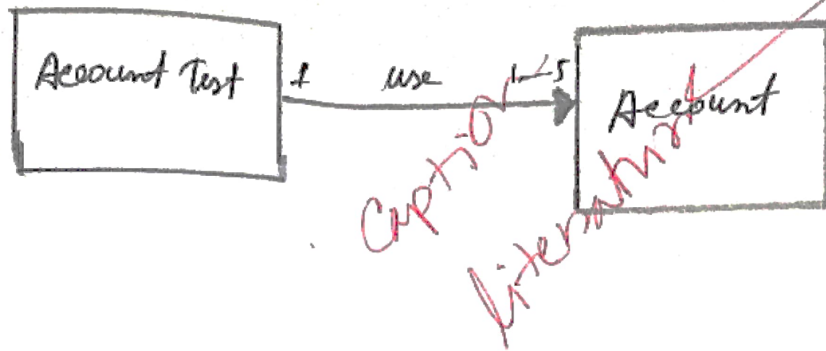
Objectives:-

- \* experiencing the object oriented approach of solving a problem
- \* demonstrate different aspects of object oriented programming.
- \* how to construct and use objects.
- \* how to define methods and call them.

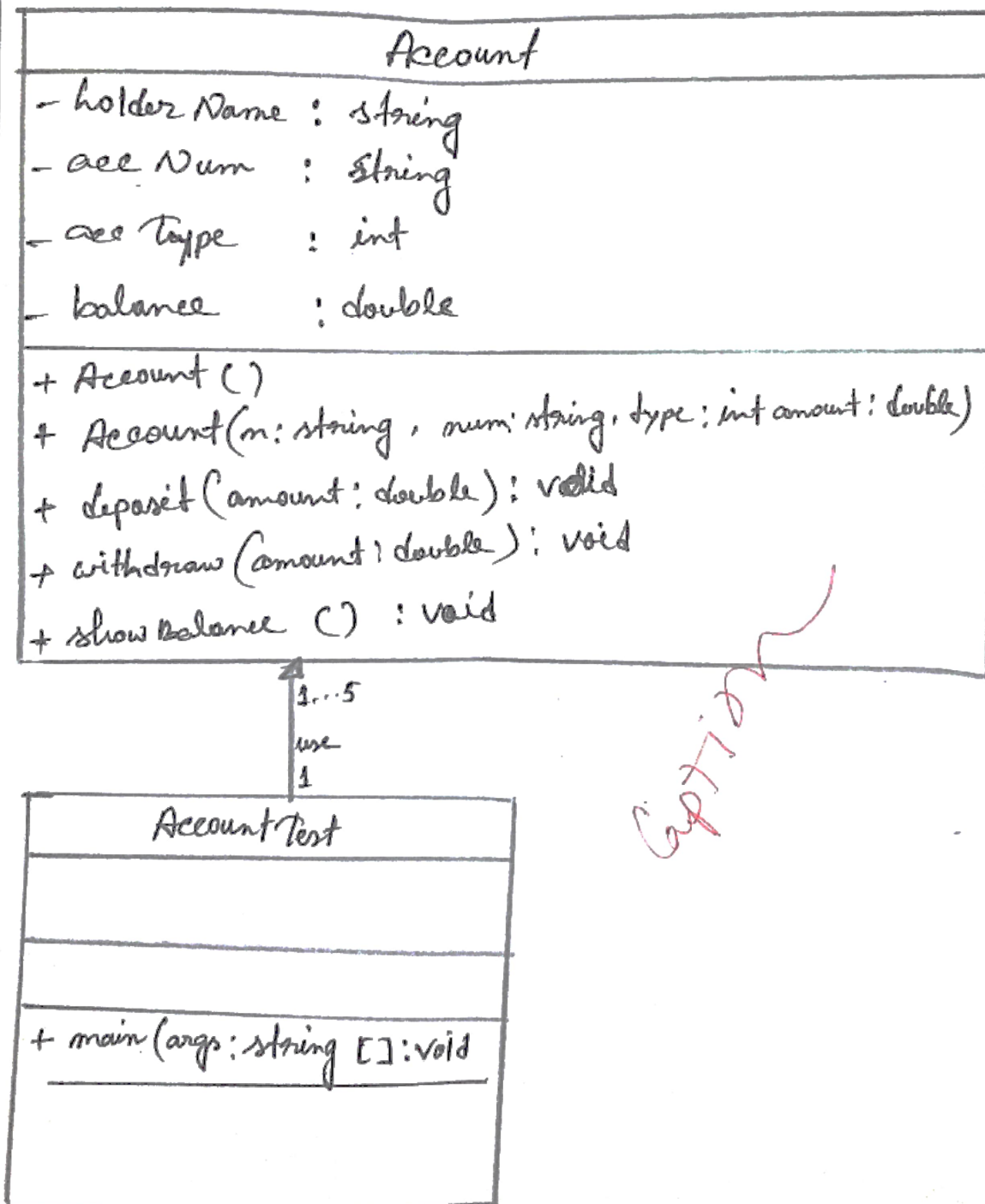
Analysis:-

After analysing our problem we have found following components of our problem to solve it.

- o class Account : this is the class that will represented a bank account



~~Design~~  
Design :-



Caption

init (name: string, num: string, type: int, amount: double):  
// assign all parameters to the respective data members

devName = name  
accNum = num  
accType = type  
balance = amount

deposit (amount: double):

// deposit specified amount and add that to the existing balance

balance += amount

withdraw (amount: double):

// withdraw specified amount if available

if amount greater than balance:

print error message

else

balance = balance - amount

print new balance after withdrawal

showBalance ():

// show the available balance with account holder name

print account holder name and available balance

```
main (args : string []):
```

// use Account class, create 5 object and show the capabilities of the class

create 5 Account class object  
show method calls

Implementation:-

```
Class Account {
```

```
private string holderName;
```

```
private string accNum;
```

```
private int accType;
```

```
private double balance;
```

```
void init (string name, string num, int type, double amount) {
```

```
holderName = name;
```

```
accNum = num;
```

```
accType = type;
```

```
balance = amount;
```

```
{
```

```
public void deposit (double amount) {
```

```
balance += amount;
```

```
}
```

```
public void withdraw (double amount) {  
    if (amount > balance) {  
        System.out.println ("Insufficient balance!");  
        System.out.println ("Your current balance is:" + balance);  
    }  
    else {  
        balance = amount;  
        System.out.println ("Your new balance:" + balance);  
    }  
}
```

```
{  
    public void showBalance () {  
        System.out.println ("Name:" + holderName);  
        System.out.println ("Balance:" + balance);  
    }  
}
```

```
class Account Test {
```

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

```
        Account [] accounts = new Account [5];
```

```
        accounts [0] = new Account ();
```

```
        accounts [1] = new Account (1);
```