

# CS6308 Java Programming Laboratory

## Classes and objects

Lab no: 06      Date: 09.04.22

### Level1 exercises

1. Define a class called Address which fields: street\_name(String), city(String) and pincode(integer). Include methods: constructor with arguments and void display().
2. Modify the Class Account to include a field acc\_holder\_adr of type Address and Include the following constructors:

- i.     **void Account(int ac,String nm,double bal, Address adr){**  
      {  
      ...  
      **acc\_holder\_adr = addr;**  
      ...  
      }  
      }
- ii.    **void Account(int ac,String nm,double bal,String st,String ct,int pin){**  
      ...  
      **acc\_holder\_adr = new Address(st,ct,pin);**  
      ...  
      }

**Define a Test class to create objects of Account and Address and test all methods.**

3. Write a class called SupermarketItem that holds the information about an item in a supermarket. The class has the following members: description(String) – brief description of the item, stock(integer) – the number of units of item available and price(double).

The member functions are: constructor with arguments, toString() – to display the SupermarketItem and

double addItem(SupermarketItem item){- which returns price of the SupermarketItem

Create a driver class to create objects of SupermarketItem and calculate the total amount until user enters -1 that keeps adding item cost to the amount by calling addItem().

## Level 2 exercises

4. Define a class called Salesperson whose data members are: age(integer), name(String), salary(double), SalesAmount(double) and noofSales(integer). The member functions are:
- constructor with three arguments to initialise member variables age, name and salary; SalesAmount and noofSales is initialised to zero
  - addSale(double amount) – method to increment the number of sales and add the amount made to the SalesAmount
  - int getSales() – to return the sales made by the Salesperson
  - double getTotalSalesAmount()- to return the TotalSalesAmount made by the Salesperson
  - display() – to display the details of the Salesperson
  - static double findBonus(Salesperson) – to return the bonus of Salesperson based on the following table:

Sales range	Bonus amount
10-20	1000
20 – 40	2000
➤ 40	5000

- Double findTotalSalary() –that returns the total salary by adding the Bonus amount to salary.
- Add a data member double salesAmountPerYear[12] to store the salesAmount made by the Salesperson every month of the year

Write a driver program to create object of Salesperson and test all methods