## Sunbeam Institute of Information Technology Pune, Karad

## Java Assignment 2

- Q1) Display hotel menu to user which have menu as
- 0. EXIT
- 1. Menu
- 2. Generate Bill

User will select items from menu along with the quantity. (eg 1. Dosa 2. Samosa 3. Idli ...) Assign fixed prices to food items(hard code the prices) When user enters 'Generate Bill' option , display total bill & exit.

Q2) Create a class Point2D , in package - "com.app.geometry" : for representing a point in x-y co-ordinate system. Create a parameterized constructor to init x & y co-ords. Add a method to return string form of point's x & y co-ords

Hint : public String getDetails())

Add is Equal method to Point 2D class: a boolean returning method: must return true if n only if both points are having same x,y co-ords or false otherwise.

Add calculateDistance method to calculate distance between current point and specified point & return the distance to the caller.

Hint: Use distance formula. Use java.lang.Math class methods --sqrt, pow etc.

Write TestPoint class, in package "tester", with a main method, Accept co ordinates of 2 points from user (Scanner) --to create 2 points (p1 & p2)

Use getDetails method to display point details.(p1's details & p2's details)

Invoke isEqual & display if points are same or different (i.e p1 & p2 are located at the same position)

If they are not located at the same position , display distance between p1 & p2