# Experiment-1

**Name of Student: Vedant Gokhale**

**Batch: AI-B2 Branch: AI Roll No-37**

**Problem Statement**

A VIT Melange committee is conducting auditions to admit interested

candidates. You need to implement a Participant class for the dance club based on the class diagram and description given below.

|  |
| --- |
| **C-Participants** |
| * counter: int * registrationId: String * name: String * contactNumber: long * branch: String |
| * **C**Participant(name:String,contactNumber:long,branch:String) * getRegistrationId(): String * getCounter(): int * setCounter(counter:int):void * getName():String * setName(name:String):void * getContactNumber():long * setContactNumber(contactNumber:long):void * getBranch():String * setBranch(branch:String):void |

# Method Description

**Partcipant(String name, long contactNumber, String branch)**

* Initialize the name, contactNumber and branch instance variables appropriately with the values passed to the constructor.
* Generate the registrationId using the static variable counter.
* The value of registrationId should start from 'D1001' and the numerical part should be incremented by 1 for the subsequent values.
* Initialize the counter in static block.

Implement the appropriate getter and setter methods.

Test the functionalities using the provided Tester class. Create two or more Participant objects and validate that the values of the member variables are proper.

# Sample Input and Output For constructor

**Input**

For first Participant object

|  |  |
| --- | --- |
| **Parameters** | **Values** |
| name | Rohit |
| contactNumber | 1234567889 |
| branch | Computer |

For second Participant object

|  |  |
| --- | --- |
| **Parameters** | **Values** |
| name | Sayli |
| contactNumber | 1988612300 |
| branch | Mechanical |

# Expected Output

Hi Rohit! Your registration id is D1001 Hi Sayli! Your registration id is D1002

import java.util.Scanner;  
  
class Participant {  
 private static int *counter*;  
 private String registrationId;  
 private String studentName;  
 private long contactNumber;  
 private String branch;  
  
 static {  
 *counter* = 1001;  
 }  
  
 public Participant(String studentName, long contactNumber, String branch) {  
 setName(studentName);  
 setContactNumber(contactNumber);  
 setBranch(branch);  
 this.registrationId = "D" + *counter*;  
 *counter* += 1;  
 System.*out*.println("Hi " + getName() + "! " + "Your registration ID is " + getRegistrationId());  
 }  
  
 public String getRegistrationId() {  
 return registrationId;  
 }

public String getName() {  
 return studentName;  
 }  
  
 public static int getCounter() {  
 return Participant.*counter*;  
 }  
  
 public long getContactNumber() {  
 return contactNumber;  
 }  
  
 public String getBranch() {return branch;}  
  
 public static void setCounter(int counter) {  
 Participant.*counter* = counter;  
 }  
  
 public void setName(String studentName) {  
 this.studentName = studentName;  
 }  
  
 public void setContactNumber(long contactNumber) {  
 this.contactNumber = contactNumber;  
 }  
  
 public void setBranch(String branch) {  
 this.branch = branch;  
 }  
}  
  
public class Tester {  
 public static void main(String[] args) {  
 Scanner input = new Scanner(System.*in*);  
 System.*out*.print("Enter name of student : ");  
 String name = input.next();  
 System.*out*.print("Enter contact number of student : ");  
 long number = input.nextLong();  
 System.*out*.print("Enter branch of student : ");  
 String branch = input.next();  
 Participant participant1 = new Participant(name,number,branch);  
 System.*out*.print("Enter name of student : ");  
 name = input.next();  
 System.*out*.print("Enter contact number of student : ");  
 number = input.nextLong();  
 System.*out*.print("Enter branch of student : ");  
 branch = input.next();  
 Participant participant2 = new Participant(name,number,branch);

# Results: Actual Output:

Enter name of student : Rohit

Enter contact number of student : 1234567889

Enter branch of student : CS

Hi Rohit! Your registration ID is D1001

Enter name of student : Sayli

Enter contact number of student : 1988612300

Enter branch of student : Mechanical

Hi Sayli! Your registration ID is D1002