Java Assignments:

1. Write a program to accept three positive numbers and output the largest of them.
2. Write a program to print the multiplication table of a number 15 up to 10 multiples.
3. WAP to print values from 1 to 20. Do not display multiples of 3

Problem 1: Write a simple program to create a Date class

```
class Date {
        int intDay, intMonth, intYear;
```

The **setter methods** must incorporate validation checks. (For example: day should be between 1 & 31, Year must be less than 1984, and so on). Now accept a date using setter methods and not the constructor.

Problem 2: Create a class Book which has following members:

private int bookNo
private String title
private String author
private float price

- Create method incrPrice(double percentage) for Book class

In main() method:
1. Create at least 3 objects of the Book class.
2. Call the incrPrice() method of Book class to increment price of book on all 3 objects
3. Display details of all books.

Problem 3: Modify the Book class to include a constructor for initializing the instance variables. Perform the below validations in the constructor and print appropriate error message if the validation fails.

- Title of the book must have atleast 4 characters
- price must be in the range 1 to 5000
- Also override the toString() method to print the details of the book.

Problem 4: Define a class Rectangle with its length and breadth.

- Provide appropriate constructor(s), which sets rectangle object with default values of length and breadth as 0 or passing value of length and breadth externally to constructor.
- Provide appropriate accessor & mutator methods to Rectangle class.
- Provide methods to calculate area, calculate perimeter and to display all information of Rectangle (dimensions, area and perimeter).
- Create a TestRectangle.java class that will contain main() function. From this main function, create 5 Rectangle objects by taking all necessary information from the user. Add the objects into an array. Iterate thru the array and for each rectangle object, calculate its area and display its information

Arrays:

3. WAP to create a simple initialised int array with 5 integers. Iterate thru the array and find sum and average of all elements.
4. WAP to create an new empty array. Read the contents of above array and for every element, find square of the number and store into new array.

5. WAP a method subArr() that accepts start index, end index and returns subset of above array. The return type must be an array.
6. WAP Java class that has a method evenElements(). This method must take an array as argument, find only even elements and display the elements.

Day-2:

7. Accept an integer and a string value at command line and print the string that many number of times. E.g. c:\>Welcome 2 should print message 2 times
8. Write a program to find sum of digits of given five-digit number. Also, extract each digit from the given number, in the reverse order. For example, if the number is 15423, the output shall be "3 2 4 5 1", with a space separating the digits.
9. Static var : Create a class Empl (id, name, sal). That has 3 cons.
   Empl(), Empl(name, sal), Empl(name)
   Create 3 Empl objects. Id has to be autogenerated.
   Sysout all 3 objects at one go

String ass:

1. Write a program that takes a String through Scanner and displays the length of the string. Also display the string into uppercase and check whether it is a palindrome or not.
2. We have an array that holds many web site names. Eg, www.google.com, www.msn.com, www.amazon.co.in, in.answers.yahoo.com, en.m.wikipedia.com, codehs.gitbooks.io, www.coderanch.com etc. Search for all sites that begin with "www" and display the total number of such sites. Eg for above eg, total is 4

Inheritance:

Write a program which creates an object of class Product that contains detail of a product and calls the member to display the details, and save the file as "UseProduct.java".

```
class Product{
  int productId;
  String description;
  displayDetails();
}
```

Problem-1: Create two classes Item and Service that derive from the Product class.

- Both the classes should override **displayDetails()** method from **Product** class.
- Create a class **UseProduct** that allow objects of class **Item** and class **Service** to be created.
- Call displayDetails() methods on each of the created objects

```
class Item …… {
  warranty (in months)
  cost of shipping (in rupees)
  manufacturer

public displayDetails(){
// code to display  }
```

```
class Service ……{
int service-charges;
}
public displayDetails(){…}
```

Day 7 : Collection Classes

Problem 1:

Create a class StudentOps having following members.

private ArrayList names – Arraylist of String type

- public void setNames() –populate names in arraylist
- setName(String str)
- public void searchName(String name) – method to search a student by name
- public void searchName(int index) – method to print student name at an index
- public void printNames( ) – method to print all names
- public void removeName(String stuName) – method to delete a name

Create a class ArrayListDemo having main method. Create an object of StudentOps class and call all methods.

Problem 2:

Create a class Book having following members:
private int bookId;
private String bname;
private String author;
private double price;

Create a class BookOperation having a hashset of Book objects
This class will have the following methods:

- void addBook(Book book) : adds a book object into the collection
- void deleteBook(int bookid) : deletes book from collection having this id
- void showAllBooks() : displays list of all books
- public Book getBookWithId(int bookid)
- public Book[] getBookWithAuthor(String author)

Test the BookOperation class methods in a TestBookOps class

Problem 3:

Create a class StudentOps having following members:

private HashMap studNames – HashMap having rollno as key and name as value. Key and value are of type String

- public void setNames( ) – method to set names in HashMap.
- public void printNames( ) – method to print all names
- public void getName(String key) – method to print value of a given key
- public void printSize( ) – method to print size of HashMap
- public void remove(String key) – method to remove a value of a given key

Create a class TestStudentOps having main method. Create an object of StudentOps class and call different operations on it.

Problem-4: Create a login application that takes username and password. Use scanner class. Now validate the password against a database of user objects that are stored in a hashmap(username, password)

Servlet assignment:

1. Write a HTML page that contains a text field and a submit button. Accept temperature in Fahrenheit and use php to convert to Celsius
   celsius = (fahrenheit - 32) * 5 / 9

2. Develop a web application as follows:
   - Design simpleInterest.html to capture Principal Amount, No of years and rate of Interest
   - SimpleIntServlet will receive these numbers and should generate response with simple interest value to user

3. Develop a web application as follows:
   - Design **login.html** to capture user name and password
   - **LoginServlet** should receive these details and validate the username and password against a database . Generate appropriate response

JDBC assignment:

Problem-1:

Write a JDBC application for a bookstore.
Book.java has following attributes : bookid, bookname, author, price
Create a corresponding table in database

Create a BookDao class with following methods:
- void addBook(Book book) – inserts this book object into database
- void deleteBook(int bookid) – deletes this book from database
- void updateBook(int bookid, int price) – update price of book
- List<Book> retrieveAllBooks() – retrieves all books from databse
- Book retrieveBookById(int bookid) – retrieve book by id

Create a BookClient class that uses all operations on BookDao

Problem-2:

WAP a JDBC app to read emp recs from Emp table, incr sal of all employees by 10% and store into a map. **empMap<empId, EmpObj>**

- Iterate thru map to show all emp records

HTML assignments:

Create the following webpages:

1.

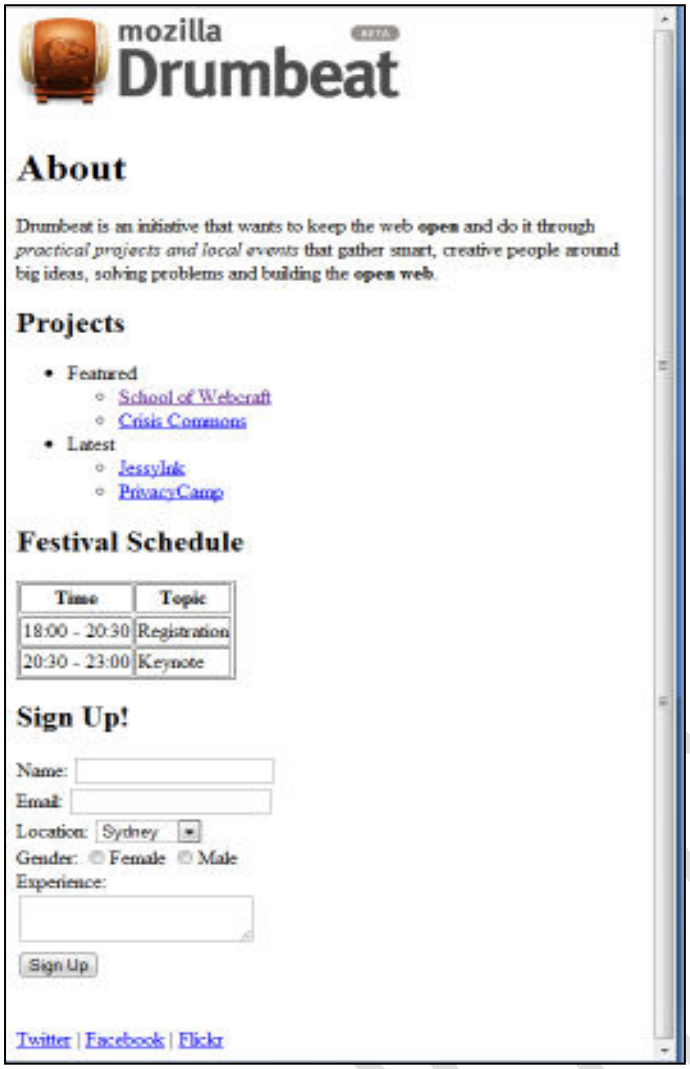
List of Courses for Fall 2013:

- MDSE 4040: Visual Merchandising
- MDSE 3350: Historic & Contemporary Styles of Apparel
- MKTG 3720: Internet Marketing
- DRTL 2080: Digital-Authoring & Publishing Tools
- JOUR 3040: Internet Marketing Concepts & Strategy

Name of Course	Monday	Tuesday	Wednesday	Thursday	Friday
MDSE 4040		9:30 AM to 10:50 AM		9:30 AM to 10:50 AM	
MDSE 3350		11:00 AM to 12:20 PM		11:00 AM to 12:20 PM	
MKTG 3720		2:00 PM to 4:50 PM			
DRTL 2080		5:30 PM to 8:20 PM			
JOUR 3040				6:30 PM to 9:20 PM	

2.

3.



4.

Resume

Abc Pqr
Unit 55, SDF II,
SEEPZ, Andheri(E),
Mumbai-400 096.
Mobile No: 9898989898
Email:*abc@patni.com*

Educational Qualifications:

Qualification	Institute	University/Board	Marks(%)	Year of Passing
BE (CS)	VJTI	Mumbai University	89%	2003
HSC	Cambridge	ICSE	97%	1999
SSC	Cambridge	ICSE	98%	1997

Skill Set :

Operating System: *Windows 9'x,Dos*
Language: *C/C++*
Front End: *VB 6.0*
DBMS: *Oracle 9i*