Lab-1

Subject	:	Advanced Java Programming
Programming Language	:	Java
Course	:	B.Tech. CSE
Date	:	13/12/2013

1.1 Objective:

- **Working with core java concepts**
- **To know how to accept values in java.**
- **How to use java packages.**

1.2 Learning Outcomes:

After completing this lab learners will be able to:

a) Learner must know how to create projects/class files in java
b) Understand the basic syntaxes used for writing java programs.
c) Compiling and running java program.
d) Importance of packages in java.
e) Importance of visibility modifier such as public, private and protected in java.
f) Why java is pure object oriented language.

1.3 Instructions

a) Learners are advised to implement the tasks on their own.
b) Understand the task well enough i.e. analyze the task and then start writing the program.
c) At any stage during writing the program if you are facing any difficulty you can ask for help.
d) Faculty will be available to guide you and support you in understanding the concepts.
e) Once you complete the task prepare a write-up as per the template given in the last section of the sheet.
f) Each student has to explain his/her understand at the end of the lab.

1.4 Tasks to Perform in the Lab

Problem-1

Create a class Rev_Number and do the following:

a) Declare variables orig, rev and r of integer type.

b) Assign the value zero to rev at the time of declaration of the variables.

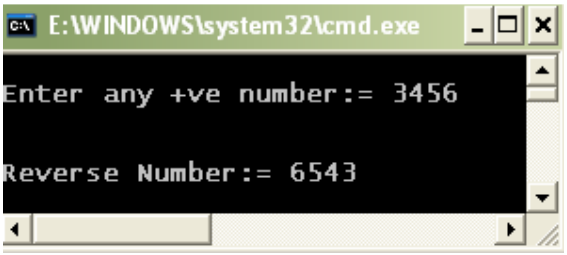
c) Initialized and object of Scanner class.

d) Write statement to accept and integer value into variable orig using nextInt() of Scanner class.

e) Apply appropriate logic to find the reverse of the number.

f) Write a statement to display the output.

Sample Output:



Problem-2:

Write a class-based with multiple items program for the given scenario below. Use appropriate C++ functionalities that have been discussed in the class when you write the program.

Scenario

Amity School of Engineering and Technology is one of the biggest institutions in India. University conduct entrance test every year to generate the ranking of the student seeking admission in different course of engineering. Therefore, students of engineering have been given a task to develop a program in java to compute the minimum and maximum score obtained by a student in the exam.

Program Requirements (or task):

Task 1: create a class Compute_Grade.

Task-2: declare variables 'i', max, and min of integer type.

Task-3: Initialize an object of Scanner class.

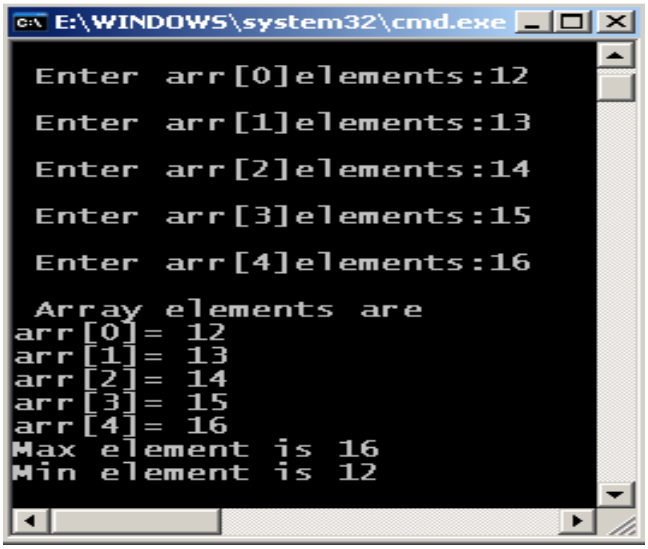
Task-4: initialize an array of integer type with sample size 5.

Task-5: use loop to accept the data/marks obtained in the array.

Task-6: Use loop again to display all the marks.

Task-7: Apply appropriate logic to find maximum and minimum marks obtained by students in the exam.

Sample Output



1.5 Template for preparing the write-up

Experiment No.

1. Objective:

_____

_____

2. Your Logic in Step by Step Manner:

Step1

Step2

Step3 and so on

3. Code

_____

_____

4. Errors/Warning if any

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5. What you did to fix the errors/warning

_____

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6. Output

Output Screen

7. Conclusions

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