

Heaven's Light is Our Guide
Rajshahi University of Engineering & Technology
Department of Computer Science & Engineering

Lab Manual

Course Code: **CSE 1204 (Sec A)**
Course Title: Sessional based on CSE 1203
Instructor: Md. Shahid Uz Zaman
Dept of CSE, RUET

Module 7 [Advanced Topics with Java]: (for Week 10)

Topic 1 [Java Game: Guess your number]

Problem statement: Write a Java program that takes a number from user and compare it to a previously stored random number. Depending upon the input the program suggests whether the input numbers is bigger or lesser than the stored number. Finally, it outputs "You Win" with number of attempts you made to do it.

The snapshot of the program:

```
Guess and enter a number: 40
Output: Increase your Guess
Guess and enter a number: 60
Output: Increase your Guess
Guess and enter a number: 53
Output: You Win!!! At 3 guesses
```

Topic 2 [Java Practice]

Problem statement: Write a Java program with the following requirement

- i) Create two files Test1.java and Test2.java in the same folder
- ii) Write SOP() in the main() of Test1 and Test2 classes
- iii) Run main() of Test2 from Test1 class
- iv) Write public/private void Display() method in Test1 and Test2
- v) Try to execute Display() of Test1 from Test1 in both the cases
- vi) Try to execute Display() of Test2 from Test1 in both the cases

Topic 3 [Java: ArrayList class] [page 179](#)

Problem statement: Write a Java program create an object **rivers** using ArrayList class with the following requirement

- i) Add five rivers
- ii) Display all rivers
- iii) Print 3rd river
- iv) Search a river
- v) Find the position (index) of a particular river
- vi) Remove a particular river
- vii) Sort the rivers
- viii) Remove all the rivers