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
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Dept of CSE, RUET

Module 7 [Advanced Topics: Java Programming]: (for Week 11)

Topic 1[inheritance: use of super keyword]

Problem Statement: For the following Java program write

    i)   to display x of class A in class B

    ii)   statement to call getX() of class A in class B

    iii)   to call parameterized constructor of in class B

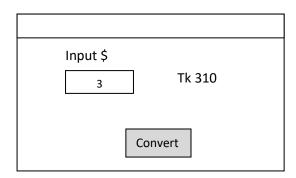|	

``java
class A{
  int x;
  public A(){
    x=0;
  }
  public A(int x){
    this.x=x;
  }
 	
  public int getX(){
    return(x+10);
  }
 	
class B extends A{
  int x=20;
  public int getX(){
    return(x+10);
  }
}
public class First{
    public static void main(String[] args) {
 	
  }
}
``	

Topic 2[interface in Java]

Problem Statement: Write three interfaces in Java namely AI,BI and CI with the following activities:

    i)   Declare method PrintA() in AI

    ii)   Declare method PrintB() in BI

    iii)   Declare method PrintC() in CI

    iv)   write body of PrintA() in class A

    v)   write body of PrintB() in class B which is inherited from class A

    vi)   write body of PrintC() in class C which is inherited from class B

    vii)   Create object of class C in main() of First class and invoke PrintA(), PrintB() and PrintC()

Topic 3[**java swing: Money Changer**]
Problem Statement: Write a Money Changer program in Java with the following components. When user clicks **Convert** button, its shows the output in a label. It also show error message if user inputs wrong value to the input box.

```
┌─────────────────────────────────────┐
│                                     │
├─────────────────────────────────────┤
│                                     │
│    Input $                          │
│    ┌──────────────┐                 │
│    │     3        │    Tk 310       │
│    └──────────────┘                 │
│                                     │
│                                     │
│              ┌──────────┐           │
│              │ Convert  │           │
│              └──────────┘           │
│                                     │
└─────────────────────────────────────┘
```

Topic 4[**java swing: practice**]
Problem Statement: Write any real-life program you like using java swing.