

CSE 215L: Programming language II Lab

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Sec: 05

Lab - 13 [Inheritance], Summer-2020 Lab Instructor: Md. Mustafizur Rahman

Objective:

- To define a subclass from a superclass through inheritance
- To invoke the superclass's constructors and methods using the super keyword
- To override the instance methods in the subclass

<u>Task-01:</u> Implement the following UML Class diagrams and test their methods.

```
Circle
-radius:double = 1.0
-color:String = "red"
+Circle()
+Circle(radius:double)
+Circle(radius:double,color:String)
+getRadius():double
+setRadius(radius:double):void
+getColor():String
+setColor(color:String):void
+toString():String
+getArea():double
       Superclas
                     extends
       Subclass
                Cylinder
-height:double = 1.0
+Cylinder()
+Cylinder(height:double)
+Cylinder(height:double,radius:double)
+Cylinder(height:double,radius:double,
   Color:String)
+getHeight():double
+setHeight(height:double):void
+toString():String
+getVolume():double
```