**North South University**

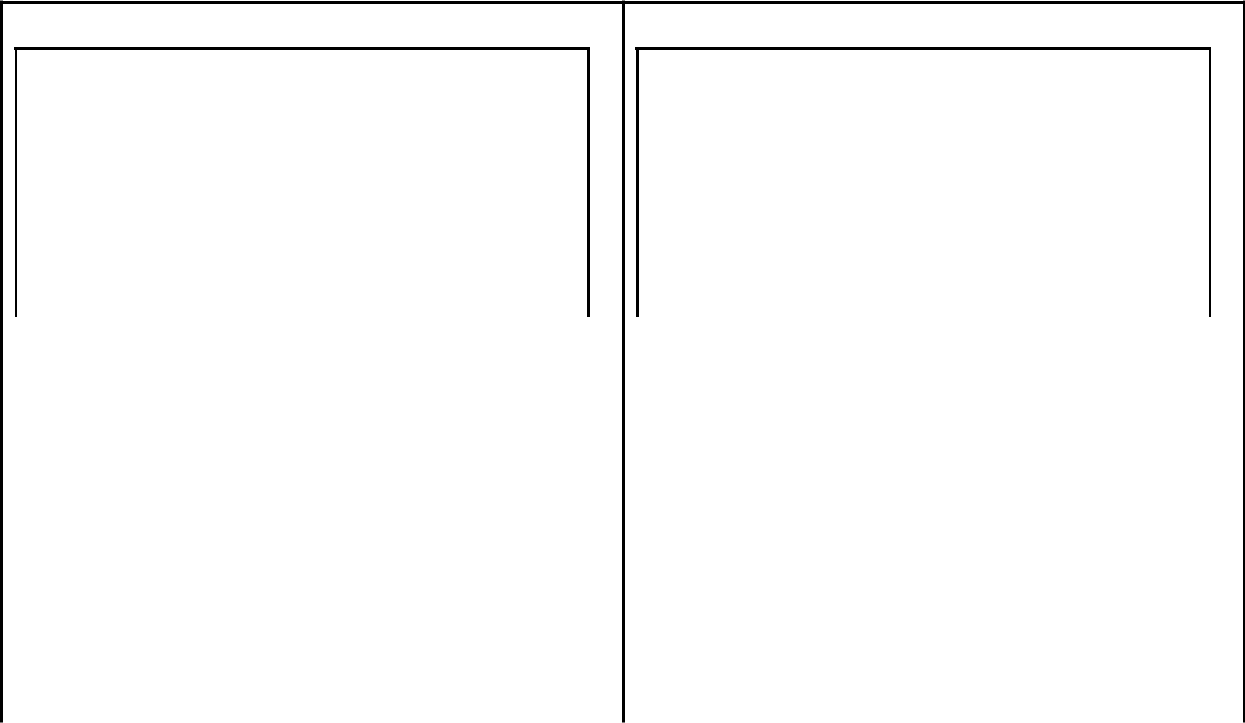
**Department of Electrical and Computer Engineering**

**CSE 215L: Programming Language II Lab**

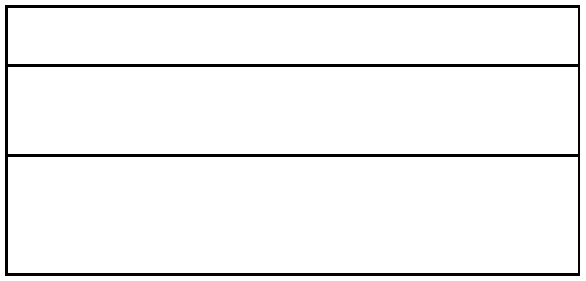
**Lab** – **10: Inheritance & Polymorphism**

**Objective:**

* To understand inheritance
* To understand polymorphism



|  |  |  |
| --- | --- | --- |
| Plant |  | Flower extends Plant |
|  |  |  |
| - name: String |  | - hasSmell: boolean |
| - color: String |  | - hasThorn: boolean |
| /\* constructor \*/ |  | /\* constructor \*/ |
| /\* accessor-mutator \*/ |  | /\* accessor-mutator \*/ |
| /\* toString \*/ |  | /\* toString \*/ |



Herb extends Plant

* isMedicinal: boolean
* season: String

/\* constructor \*/

/\* accessor-mutator \*/

/\* toString \*/

In main method, create an array of Plant objects and implement these methods: static void add(Plant [] plants, Plant p) // to add new plant object into the array static void remove(Plant [] plants, String n) // remove a plant given its name static Plant search(Plant [] plants, String n) // search for a plant given its name static void display(Plant [] plants) // display all Plant objects