Credit Name: Chapter 8
Assignment Name: University Mastery

Name: Grayson Ardron

Reflection log

I first made the abstract class UEmployee with variables set for a users first and last name as well as salary

```java
public abstract class UEmployee {
    private String firstName, lastName;
    double salary;


    //constructor method

    public UEmployee(String fN, String lN, double sL)
    {
        firstName = fN;
        lastName = lN;
        salary = sL;
    }

    //accessors
    public String getfirstName()
    {
        return firstName;
    }
    public String getlastName()
    {
        return lastName;
    }
    public double getsalary()
    {
        return salary;
    }


    //modifiers
    public void setfirstName(String f)
    {
        firstName = f;
    }
    public void setlastName(String l)
    {
        lastName = l;
    }
    public void setsalary(Double s)
    {
        salary = s;
    }


    public String toString()
    {
        return(super.toString() + firstName + " " + lastName + "Salary: " + salary);
    }

}
```

I then created two classes that extend UEmployee each for a different job title. These are different account outlines.

Staff

```java
public class Staff extends UEmployee {

    private String jobTitle;

    public Staff(String fN, String lN, double sL, String j)
    {
    super(fN, lN, sL);
    jobTitle = j;
    }

    public String getjobTitle()
    {
        return jobTitle;
    }

    public void setjobTitle(String j)
    {
        jobTitle = j;
    }


    public String toString()
    {
        return("Members: " + jobTitle);
    }

}
```

Faculty

```java
public class Faculty extends UEmployee  {

    private String department;

    public Faculty(String fN, String lN, int sL, String d) {
        super(fN, lN, sL);

        department = d;
    }

    public String getdepartment()
    {
        return department;
    }

    public void setdepartment(String d)
    {
        department = d;
    }

    public String toString()
    {
        return(super.toString() + "Department name: " + department);
    }

}
```

And finally tested the program in University.java using user input and pre set values

```java
import java.util.Scanner;


public class University {

    public static void main(String[] args)
    {
        Faculty emp1 = new Faculty("Bob", "Smitht ", 100000, "Nuclear sciences" );
        Staff emp2 = new Staff("Shaquel", "Amor ", 2000 ,", Janitor");

        Scanner input = new Scanner(System.in);

        System.out.println(emp1);
        System.out.println(emp2);
        emp1.setdepartment("science");
        System.out.println(emp1.getdepartment());
        emp2.setjobTitle("Cool");
        System.out.println(emp2.getjobTitle());


    }

}
```