LAB 1 OOPs

ICredentials

package com.greatlearning.interfaces;

import com.greatlearning.model.*;

public interface ICredentials {

    public String generateEmailAddress (String firstName, String lastName, String department);

    public String generatePassword();

    public void showCredentials (Employee emp);

}

CredentialService

package com.greatlearning.services;

import com.greatlearning.interfaces.ICredentials;
import com.greatlearning.model.Employee;
import java.util.Random;

public class CredentialService implements ICredentials {

    public String generateEmailAddress (String firstName, String lastName, String department) {

        return firstName+lastName+"@"+department+"gl.com";
    }
    public static void main(String [] args) {

        // CredentialService c = new CredentialService();
        // c.generatePassword();
        // System.out.println("Generated password: ");

```java
        }

    public String generatePassword() {
        String password = "";
        String capitalLetter = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";
        String smallLetter = "abcdefghijklmnopqrstuvwxyz";
        String numbers = "0123456789";
        String speacialCharacters = "!\"#$%&'()*+,-./:;<=>?@[]^_`{|}~";

        String values = capitalLetter+smallLetter+numbers+speacialCharacters;

        Random random= new Random();


        for (int i=0;i<8; i++) {

            int index = random.nextInt(values.length());
            System.out.println("index :" + index);
            char c = values.charAt(index);
            System.out.println("pickedup character :" + c);

            password+= String.valueOf(c);
            System.out.println("password : " + password);
        }
         return password;

    }

        public void showCredentials (Employee emp) {
            System.out.println("");
            System.out.println("Hi : "+ emp.getFirstName()+ "" +emp.getLastName()+ ".
Following are the credentials: ");
            System.out.println("Email is: "+ emp.getEmail());
            System.out.println("Password is: "+ emp.getPassword());
        }

}
```

Employee

```java
package com.greatlearning.model;

public class Employee {
```

```java
private String firstName;
private String lastName;
private String email;
private String password;

public Employee (String firstName, String lastName) {

        this.firstName = firstName;
        this.lastName = lastName;


}

public String getFirstName() {
        return firstName;
}

public void setFirstName(String firstName) {
        this.firstName = firstName;
}

public String getLastName() {
        return lastName;
}

public void setLastName(String lastName) {
        this.lastName = lastName;
}

public String getEmail() {
        return email;
}

public void setEmail(String email) {
        this.email = email;
}

public String getPassword() {
        return password;
}

public void setPassword(String password) {
        this.password = password;
}
```

}

DriverClass

```java
package com.greatlearning.main;
import java.util.Scanner;
import com.greatlearning.interfaces.ICredentials;
import com.greatlearning.model.Employee;
import com.greatlearning.services.CredentialService;

public class DriverClass {

    public static void main(String [] args) {
        Scanner sc = new Scanner(System.in);

        System.out.println("Please enter firstName ");
        String firstName = sc.next();

        System.out.println("Please enter lasttName ");
        String lastName = sc.next();

        Employee emp = new Employee(firstName, lastName);

        System.out.println("Please enter the department from the following");
        System.out.println("1. Technical");
        System.out.println("2. Admin");
        System.out.println("3. Human Resource");
        System.out.println("4. Legal");


        int option = sc.nextInt();

        String generatedEmail = null;
        String generatedPassword = null;

        ICredentials ic = new CredentialService ();

        switch (option) {

        case 1:

            generatedEmail=
ic.generateEmailAddress(firstName,lastName,"Technical");
            generatedPassword = ic.generatePassword();
```

```java
					break;

			case 2:
					generatedEmail= ic.generateEmailAddress(firstName,lastName,"Admin");
					generatedPassword = ic.generatePassword();
					break;

			case 3:
					generatedEmail= ic.generateEmailAddress(firstName,lastName,"Human
Resource");

					generatedPassword = ic.generatePassword();
					break;

			case 4:
					generatedEmail= ic.generateEmailAddress(firstName,lastName,"Legal");
					generatedPassword = ic.generatePassword();
					break;

					default:
							System.out.println("Enter a valid option");
							sc.close();
							return; }



			emp.setEmail(generatedEmail);
			emp.setPassword(generatedPassword);


			ic.showCredentials(emp);

			sc.close();


			}

	}
```