**Project: Email Application using corejava**

* **Project Aim :**

A basic Java project focused on applying object-oriented design in a real world application.

* **Application will do this following:**

1. Generate an email with the following syntax: firstname.lastname@department.company.com
2. Determine the department (sales, development, accounting), if none it leave blank
3. Generate a random String for a password
4. Have set methods to change the password, set the mailbox capacity, and define an alternate email address
5. Have get methods to display the name, email, and mailbox capacity

Coding:

Class: EmailApp.java:

package emailapp;

public class EmailApp {

public static void main(String[] args) {

// **TODO** Auto-generated method stub

Email em1=new Email("Abhinandan","Patil");

//em1.setAlternateEmail("abhi@gmail.com");

System.***out***.println(em1.showInfo());

}

}

Class: Email.java

package emailapp;

import java.util.Scanner;

public class Email {

private String firstName;

private String lastName;

private String password;

private String department;

private String email;

private int mailboxCapacity=500;

private int defaultPasswordLength=8;

private String alternateEmail;

private String companySuffix = "ampltd.com";

//Constructor to receive the firstname and lastname

public Email(String firstName,String lastName) {

this.firstName=firstName;

this.lastName=lastName;

//System.out.println("EMAIL CREATED: "+this.firstName+" "+this.lastName);

//call a method for asking department. Return the department

this.department=setDepartment();

//System.out.println("Department: "+ this.department);

//call a method that returns random password

this.password = randomPassword(defaultPasswordLength);

System.***out***.println("Your Password is: "+this.password);

//combine elements to generate email

email = firstName.toLowerCase() + "." + lastName.toLowerCase()+ "@" + department.toLowerCase() +"."+ companySuffix;

//System.out.println("Your Email is: " +email);

}

//Ask for the Department

private String setDepartment() {

System.***out***.print("New Employee: "+ firstName +".Department\n1 for Sales\n2 for Developement\n3 for Accounting\n0 for none\nEnter Department Code: ");

Scanner in=new Scanner(System.***in***);

int depChoice = in.nextInt();

if(depChoice == 1) {

return "Sales";

}

else if(depChoice == 2){

return "Developement";

}

else if(depChoice == 3){

return "Accounts";

}

else {

return "";

}

}

//Generate the Random Password

private String randomPassword(int length) {

String passwordSet="ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789!@#$%";

char[] password = new char[length];

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

int rand = (int)(Math.*random*() \* passwordSet.length());

password[i] =passwordSet.charAt(rand);

}

return new String(password);

}

//Set the mail box capacity

public void setMailboxCapacity(int capacity) {

this.mailboxCapacity = capacity;

}

//Set the alternate email

public void setAlternateEmail(String altEmail) {

this.alternateEmail = altEmail;

}

//Change the

public void changePassword(String password) {

this.password = password;

}

public int getMailboxCapacity() {

return mailboxCapacity;

}

public String getAlternateEmail() {

return alternateEmail;

}

public String getPassword() {

return password;

}

public String showInfo() {

return "DISPLAY NAME: " + firstName.toUpperCase() + " " + lastName.toUpperCase() +

"\nCOMPANY EMAIL: " + email +

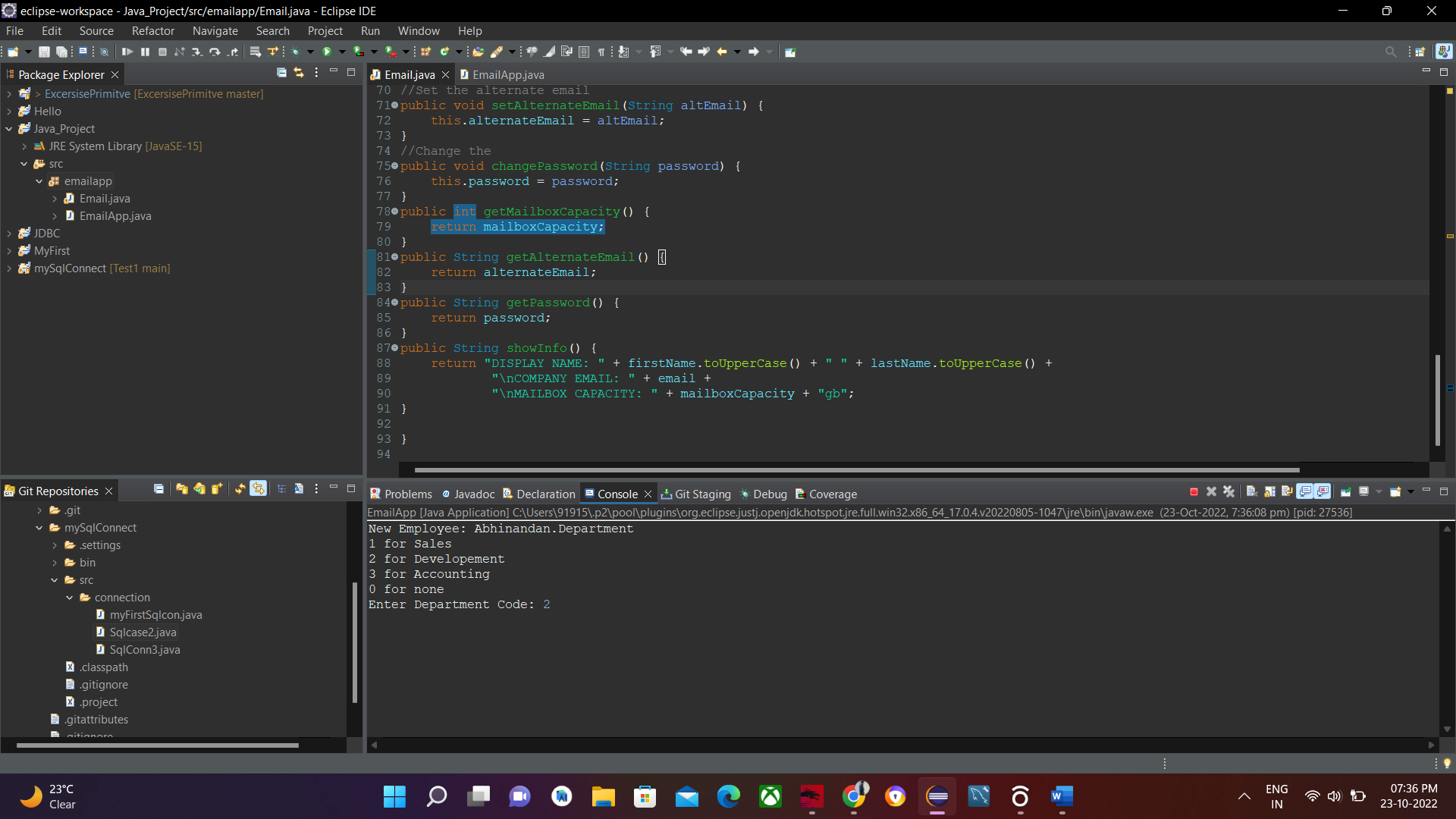
"\nMAILBOX CAPACITY: " + mailboxCapacity + "gb";

}

}

Output:

For user input code:



After Input:

