JSPM'S

Bhivarabai Sawant Institute of Technology & Research Wagholi,

Pune-412207

Department Of Computer Engineering

Academic Year 2020-21

LP-II Mini Project Report

On

"Covid-19 Patients Data Management System"

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Under the guidance of

Prof. Vijay Sonawane

Subject : Laboratory Practice –II

DEPARTMENTOFCOMPUTERENGINEERING

BHIVARABAI SAWANT INSTITUTE OF TECHNOLOGY & RESEARCH

WAGHOLI, PUNE – 412 207

CERTIFICATE

This is to certify that the **Sanobar Shaikh** and **Arati Thorat** submitted their Project report on under my guidance and supervision. The work has been done to my satisfaction during the academic year 2020-2021 under SavitribaiPhule Pune University guidelines.

Date: 15-11-2020

Place: BSIOTR, PUNE.

Prof. Vijay Sonawane
Project Guide

Dr.Prof. GayatriBhandari
H.O. D.

ACKNOWLEDGEMENT

This is a great pleasure & immense satisfaction to express our deepest sense of gratitude & thanks to everyone who has directly or indirectly helped us in completing our Project work successfully.

We express our gratitude towards guide Prof. Vijay Sonawane and Dr.Prof. G. M. Bhandari Head of Department of Computer Engineering, Bhivarabai Sawant Institute Of Technology and Research, Wagholi, Pune who guided& encouraged us in completing the Project work in scheduled time. We would like to thanks our Principal, for allowing us to pursue our Project in this institute.

Sanobar Shaikh

Arati Thorat

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TITLE

Create a small application by selecting relevant system environment/ platform and programming languages. Narrate concise Test Plan consisting features to be tested and bug taxonomy. Prepare Test Cases inclusive of Test Procedures for identified Test Scenarios. Perform selective Black-box and White-box testing covering Unitand Integration test by using suitable Testing tools. Prepare Test Reports based on Test Pass/Fail Criteria and judge the acceptance of application developed.

PROBLEM DEFINATION

Perform Desktop Application testing using Automation Tool like JUnit generate Test Report by Using tool like Apache Maven.

PREREQUISITE

Knowledge of Core Java, Basic Concepts of Unit Testing, Test Cases Writing using Junit etc tool .

INTRODUCTION

We propose a project called as **"Covid-19 Patients Data Management System"** system is designed for maintaining track of Covid-19 patients in hospitals. We can use same system for different hospitals.

In this project first admin will register himself or herself and create his or her user id and password. After that the admin will login to the system,whenever any positive patients came to the hospital the admin will make his or her entery in positive patients list also admin can view positive patients list.

After getting treatement when the patient get recover from Covid-19 the admin will make his entery in discharged patients list also admin can view discharged patients list. If the work of admin get completed the admin can logout from the system.

SYSTEM REQUIREMENTS

Software Requirements:

- Operating System: Windows 10
- Front end: Eclipse-jee-mars-2-win32-x86_64
- Database : MySQL Server 5.5

Hardware Requirements:

- System type: 64-bit Operating System
- Processor :Intel(R) Core(TM)i3-5005U CPU 2.00GHz
- Installed Memory(RAM):8.00GB

LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives:

We are going to learn how to Prepare Test Cases inclusive of Test Procedures for identified Test Scenarios. Perform selective Black-box and White-box testing covering Unit and Integration test by using suitable Testing tools. also Prepare Test Reports based on Test Pass/Fail Criteria.

Outcomes:

We are able to understand Unit and Integration testing with Tool with Test Report.

TEST CASES

Test Case ID	Test Case Objective	Pre-requisite	Steps	Input Data	Expected Objective	Actual Objective	Status
TC_01	Verify username and Password	Textfield Should be enable	Enter valid user name Enter valid password	Sana Sana123	Login Successful	Login Successful	Pass
TC_02	Verify username and Password	Textfield Should be enable	Enter valid user name Enter valid password	abc 123	Login Successful	Login Failed	Fail
TC_03	Admin Registration	Textfield Should be enable And user name must be unique	Enter Name Enter Email Enter Username Enter Password	Sana Shaikh sana@gmail. .com Sana Sana123	Admin register successful	Admin register successful	Pass
TC_04	Admin Registration	Textfield Should be enable And user name must be unique	Enter Name Enter Email Enter Username Enter Password	Sana Shaikh sana@gmail. .com Sana Sana123	Admin register successful	Admin register Fail Duplicate Username	Fail

TC_05	Add Positive Patients	Textfield Should be enable And patients no must be unique	Enter Valid Data	Entered Valid data and unique patient no	Patient added successfully	Patient added successfully	Pass
TC_06	Add Positive Patients	Textfield Should be enable And patients no must be unique	Enter Valid Data	Entered Valid data and duplicate patient no	Patient added successfully	Unable to add Patients	Fail
TC_07	Add Discharged Patients	Textfield Should be enable And patients no must be unique	Enter Valid Data	Entered Valid data and unique patient no	Patient added successfully	Patient added successfully	Pass
TC_08	Add Discharged Patients	Textfield Should be enable And patients no must be unique	Enter Valid Data	Entered Valid data and duplicate patient no	Patient added successfully	Unable to add Patients	Fail

THEORY CONCEPTS

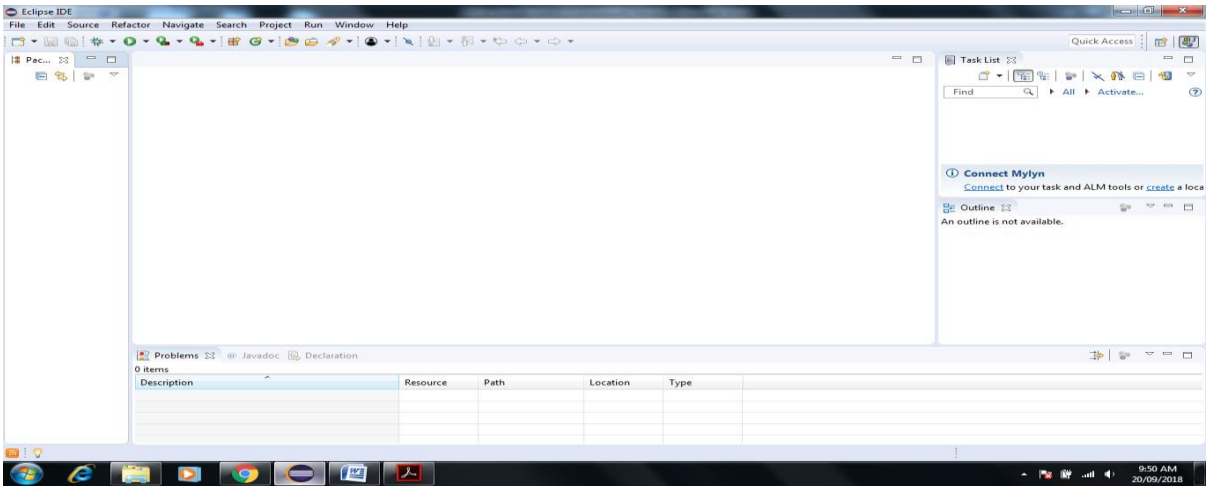
1) What is Unit Testing?

Unit Testing of software applications is done during the development (coding) of an application. The objective of Unit Testing is to isolate a section of code and verify its correctness. In procedural programming a unit may be an individual function or procedure.The goal of Unit Testing is to isolate each part of the program and show that the individual parts are correct. Unit Testing is usually performed by the developer.

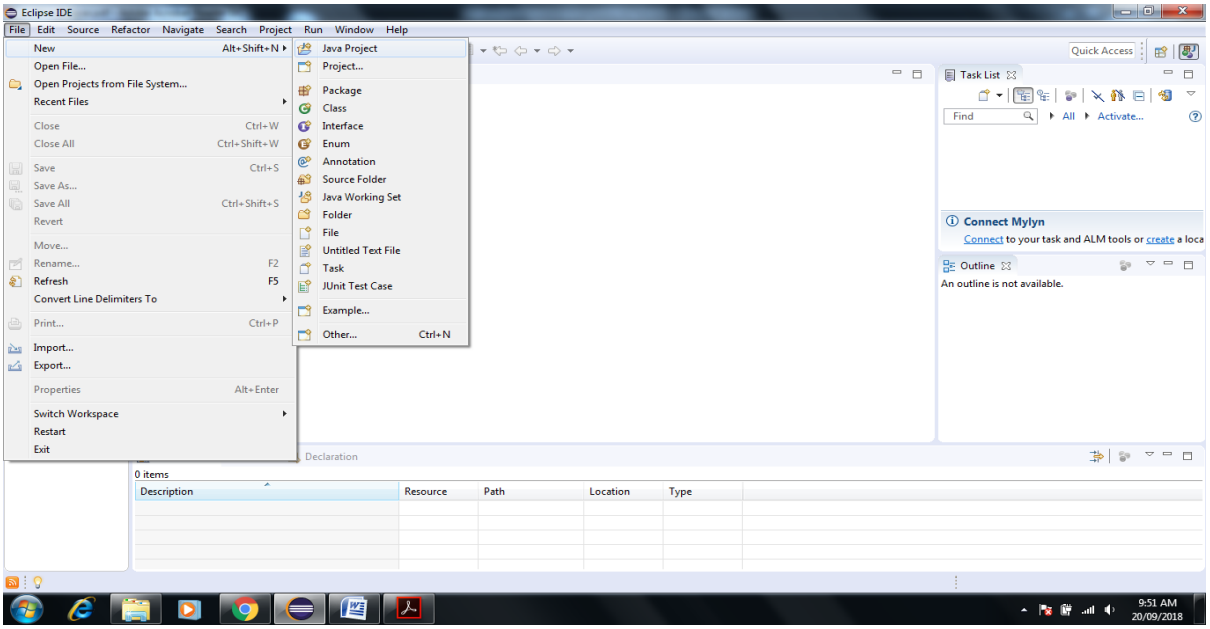
2) How to Create Simple Junit Test in Eclipse IDE

1. Download JDK 1.8 and Eclipse latest version here we are using eclipse-java-photon-R-win32.

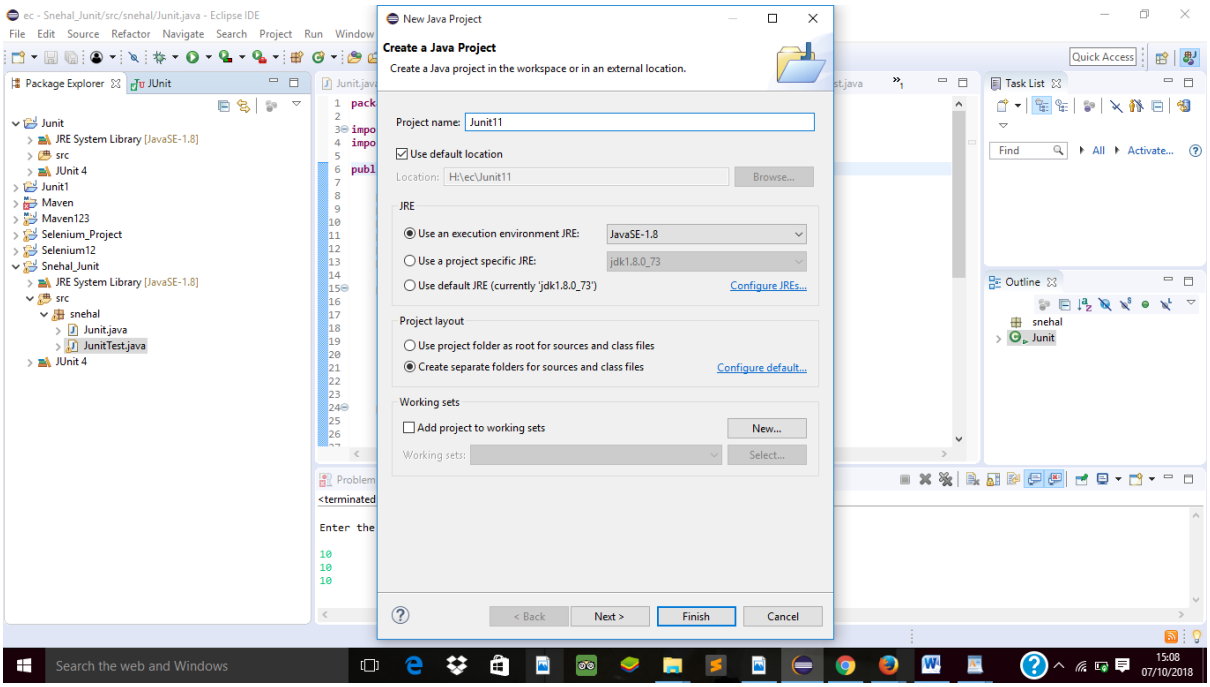
2. Open Eclipse IDE.



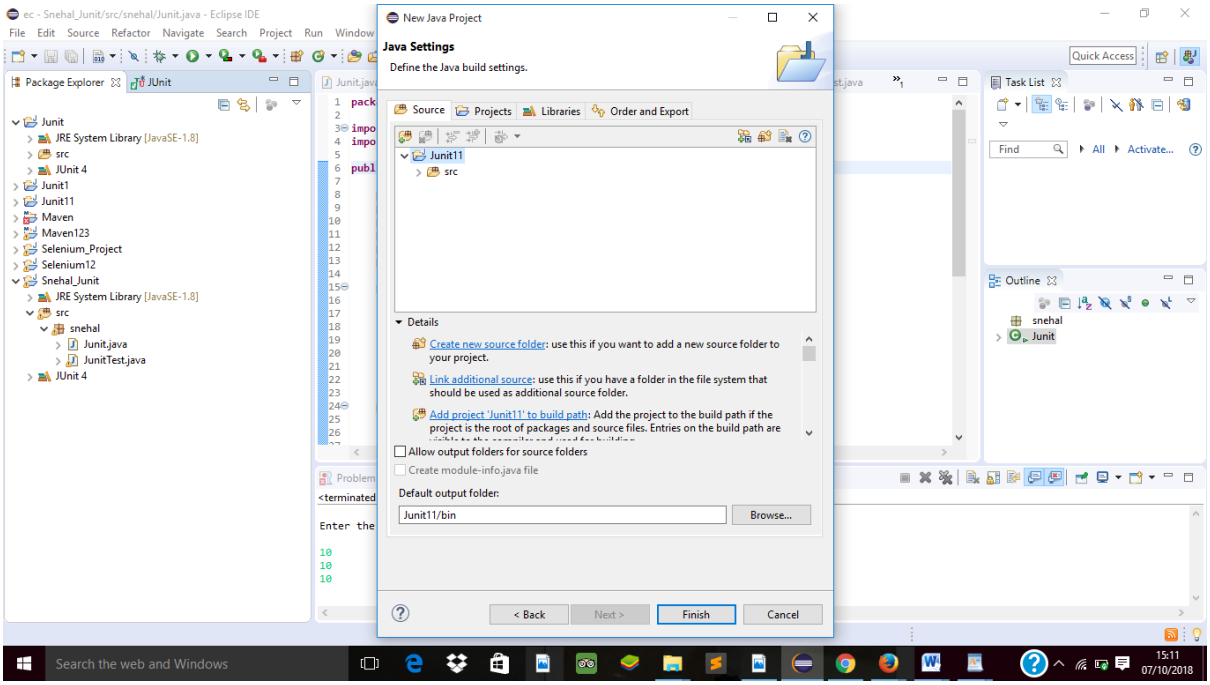
3. Go to File and Select New -> Create New Java Project



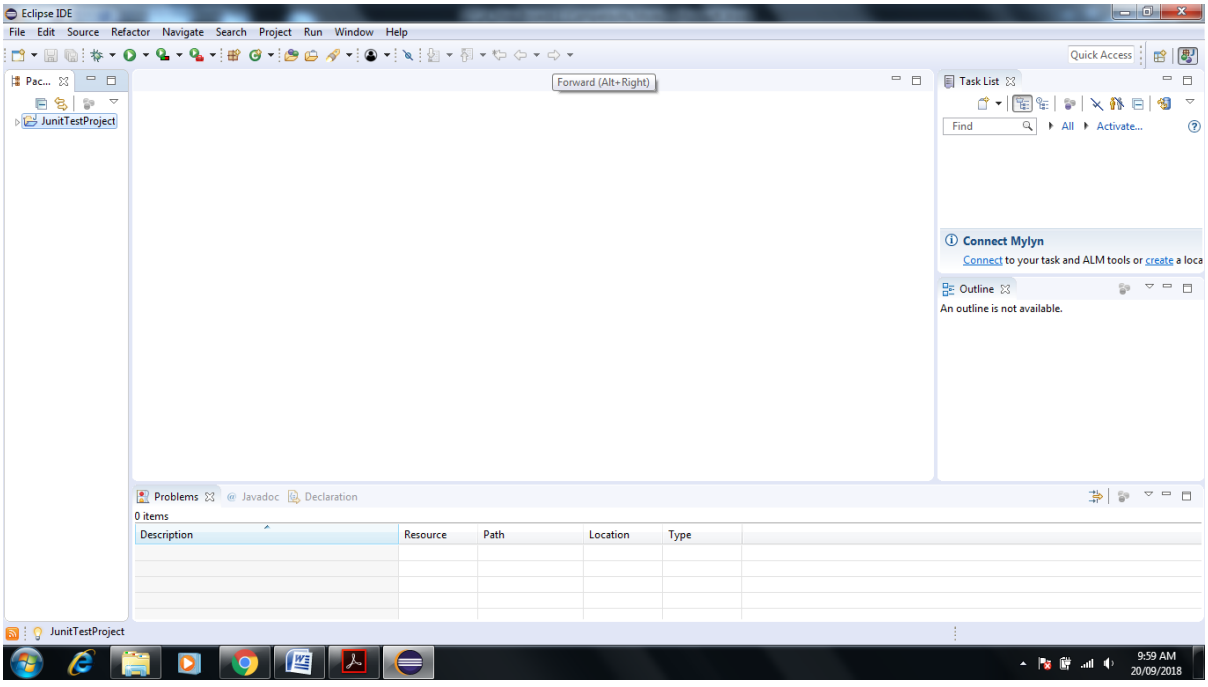
4. Give Junit name to the project and check use project folder as root for source and class files



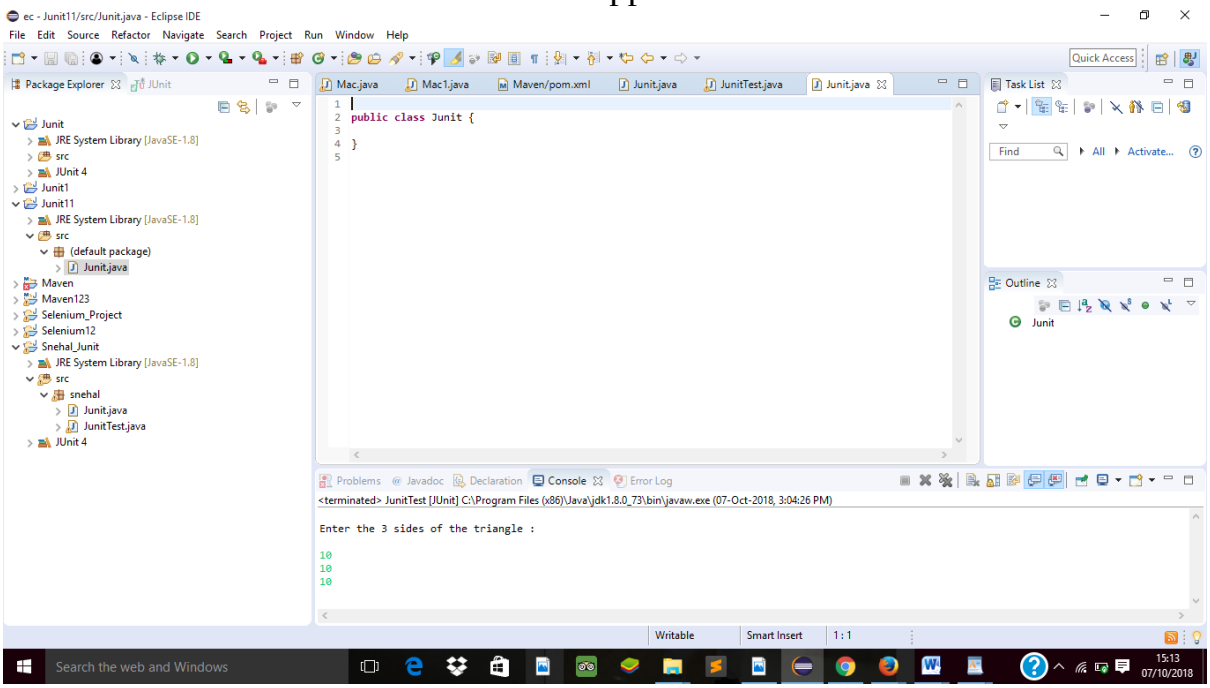
5. Click on Next-> Next Screen will Appear-> Click Finish



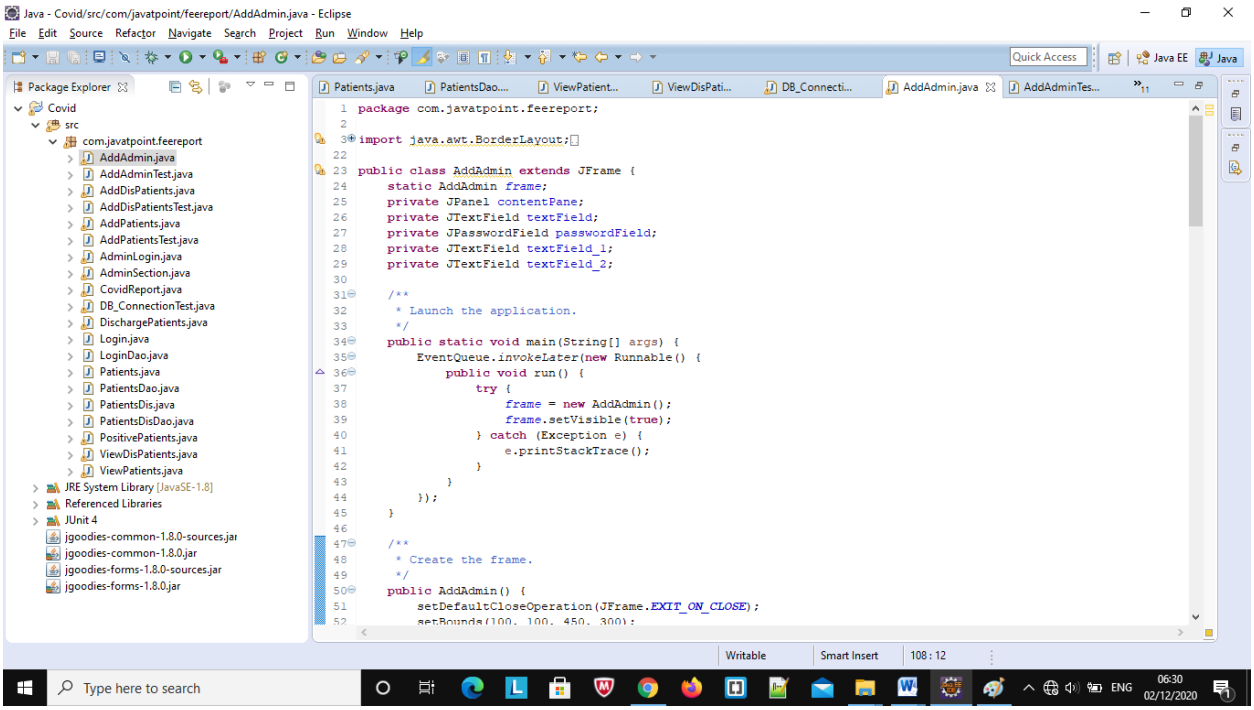
6. Next Screen Shown Junit Folder in Project Explorer



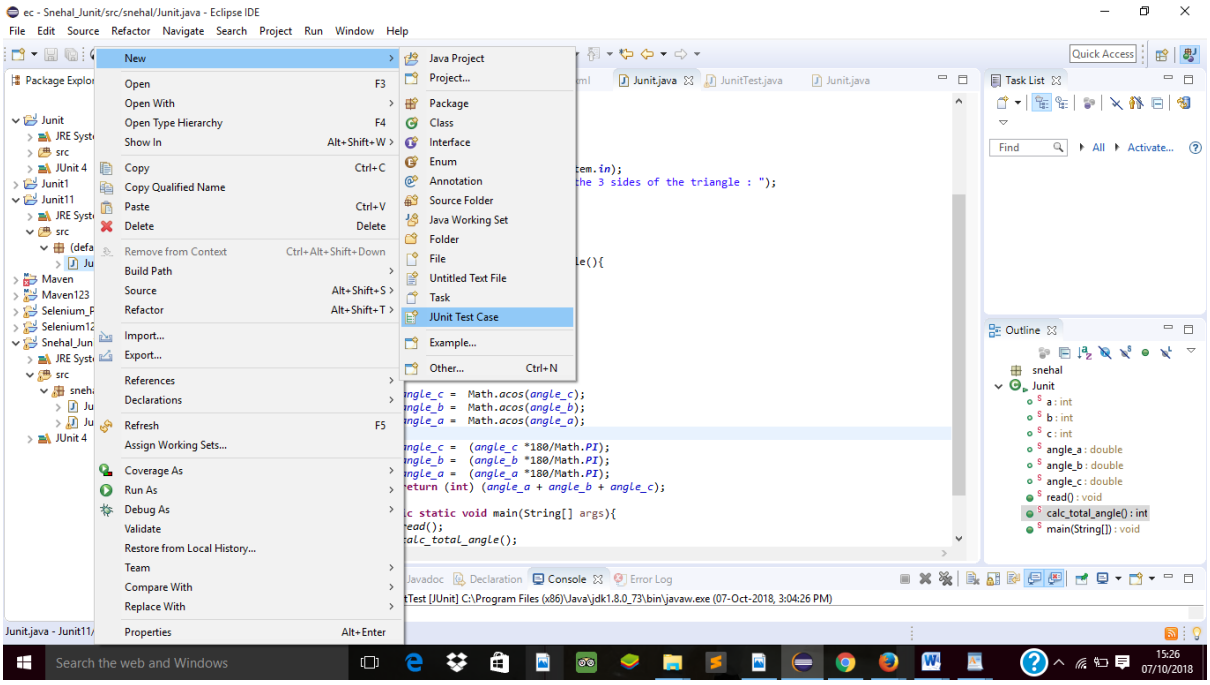
7. Right Click on Folder name Junit->New->Package Name->
Click on Finish ->Right Click on Package->New->Class give the name Junit>Click Finish--->Next screen will appear.



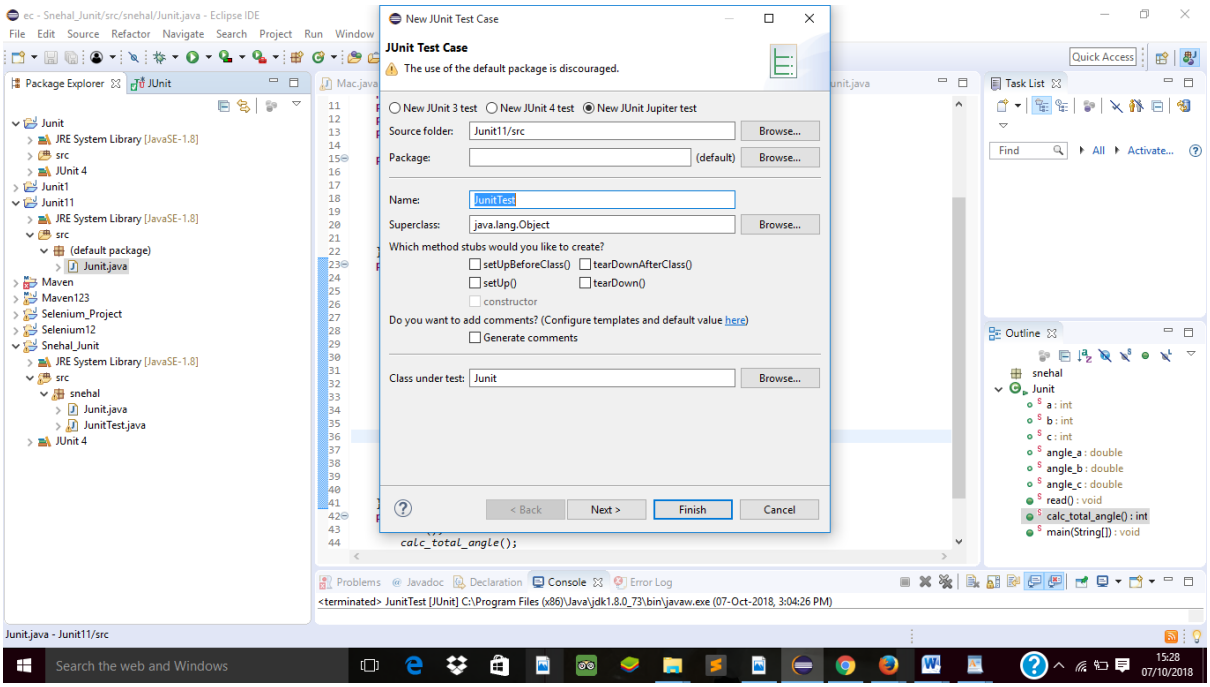
8. Write a program to add the admin



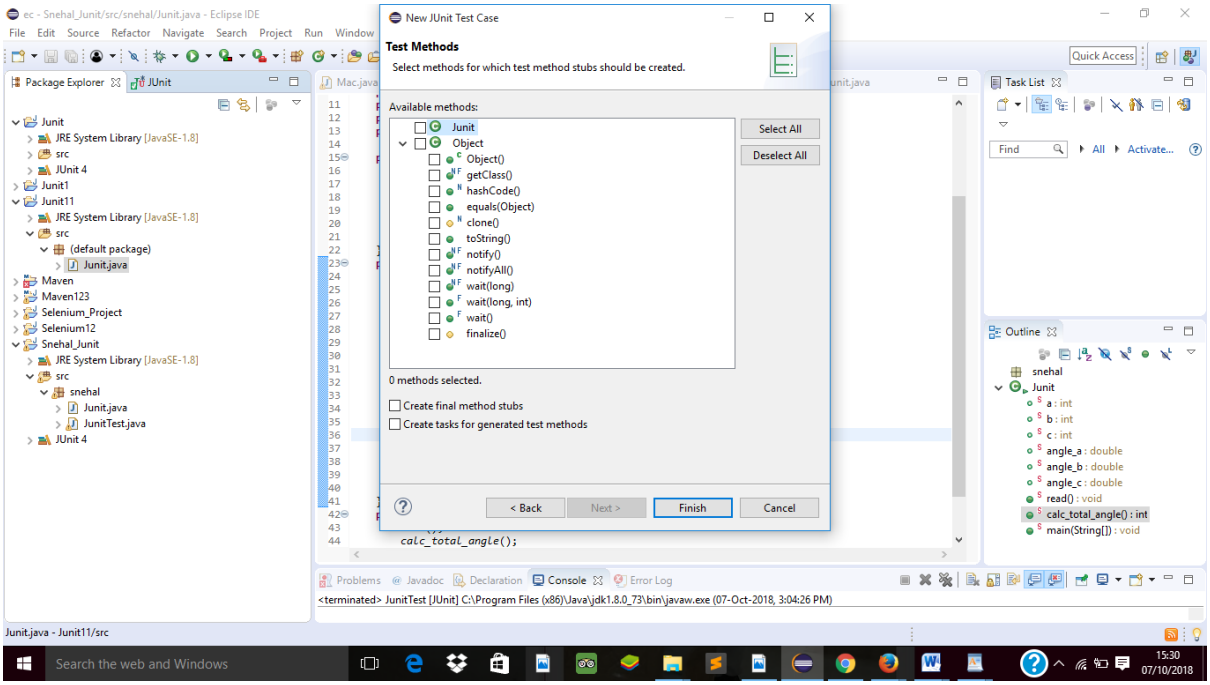
9. Write Test Cases for Java Program
   Right click on Junit-> New-> Click on Junit Test Cases.



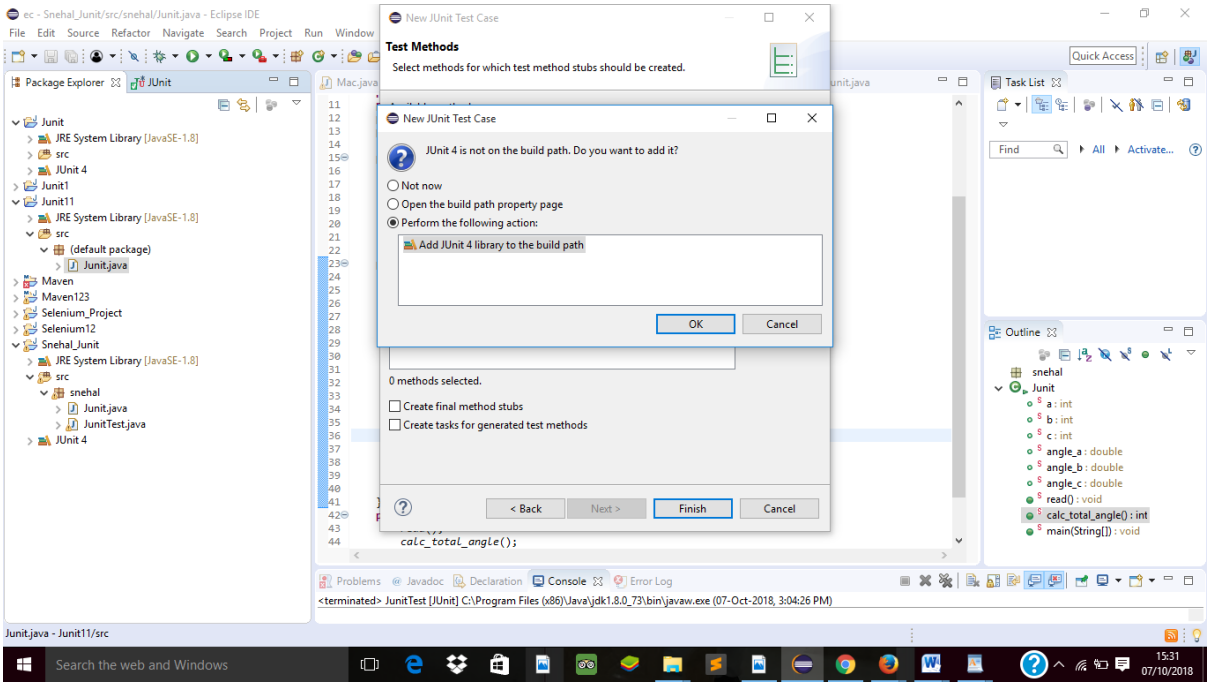
10. Name test suite as JunitTest and choose New Junit4 test .



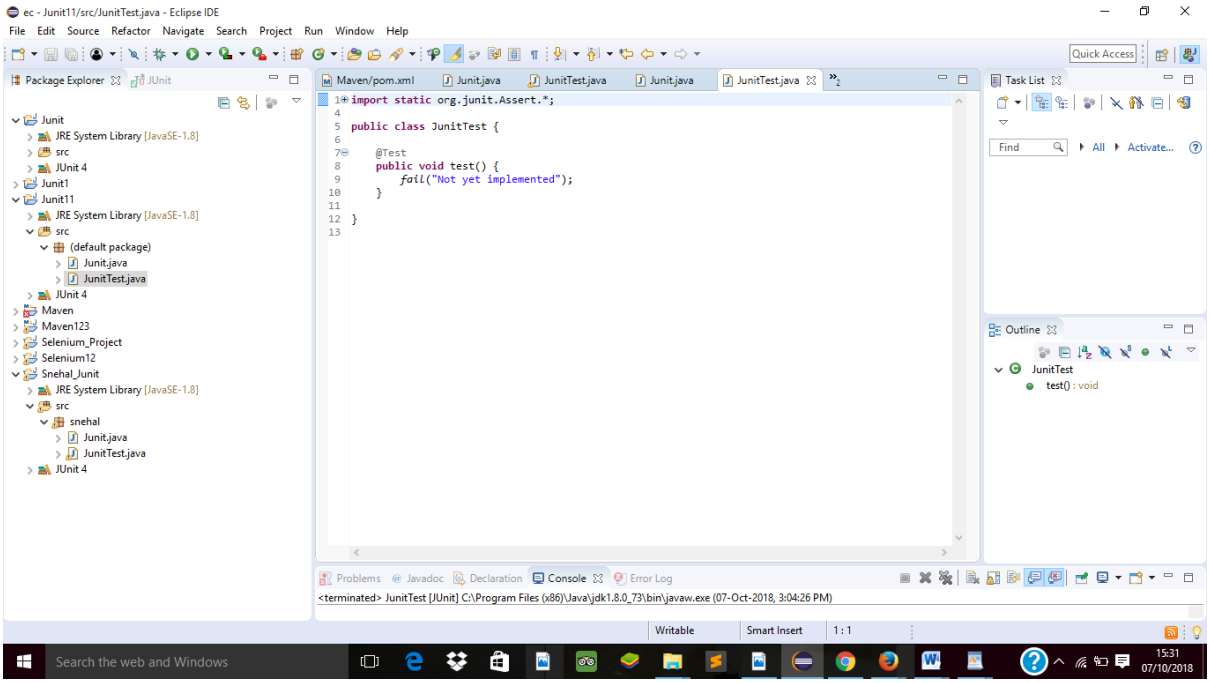
11.Click on add Checkbox



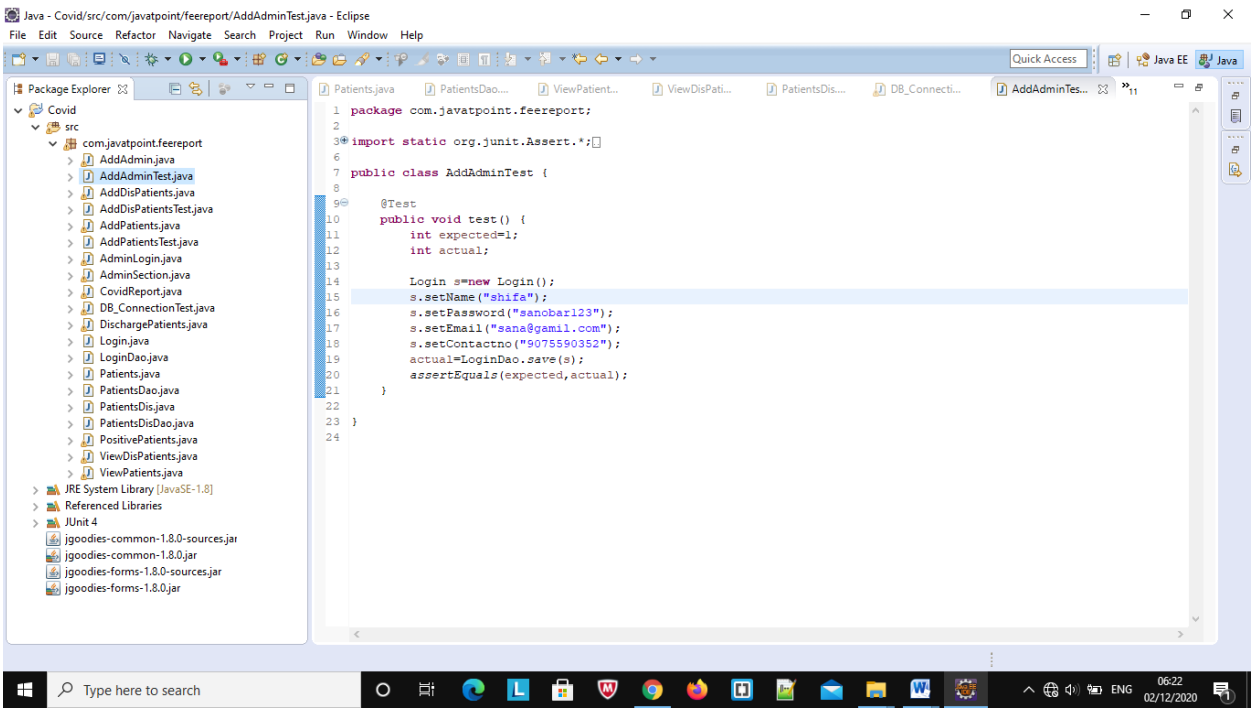
12. Click on Next-> Ok



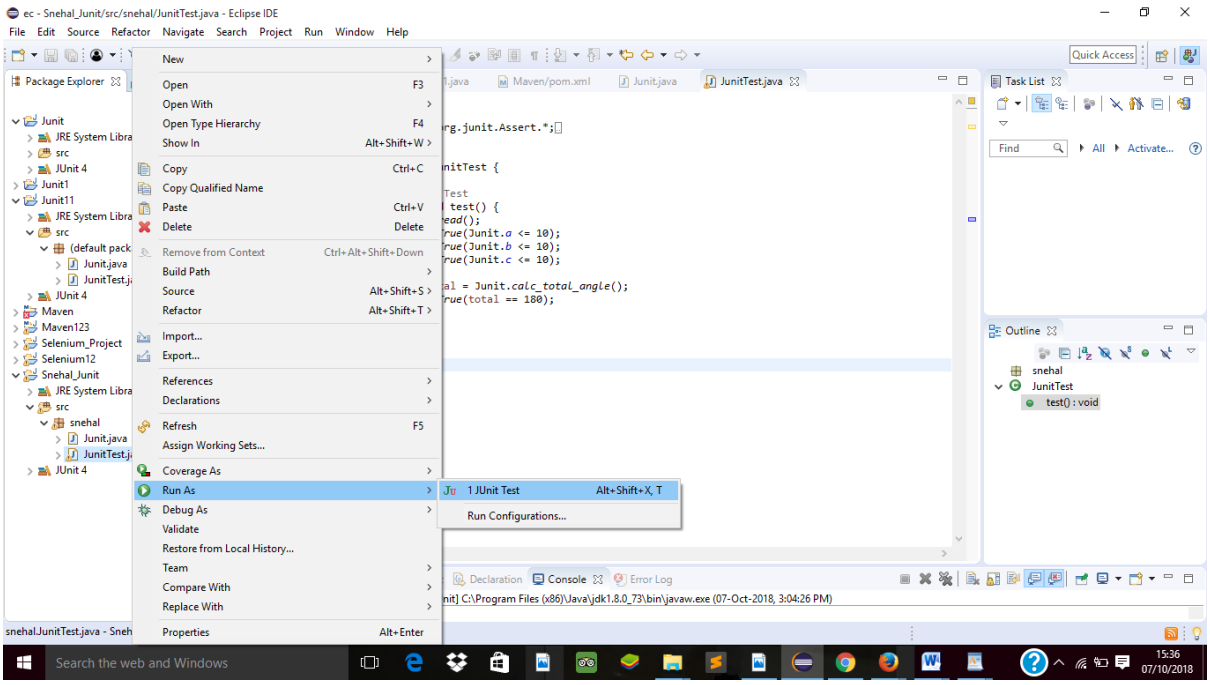
13. Next screen will appear



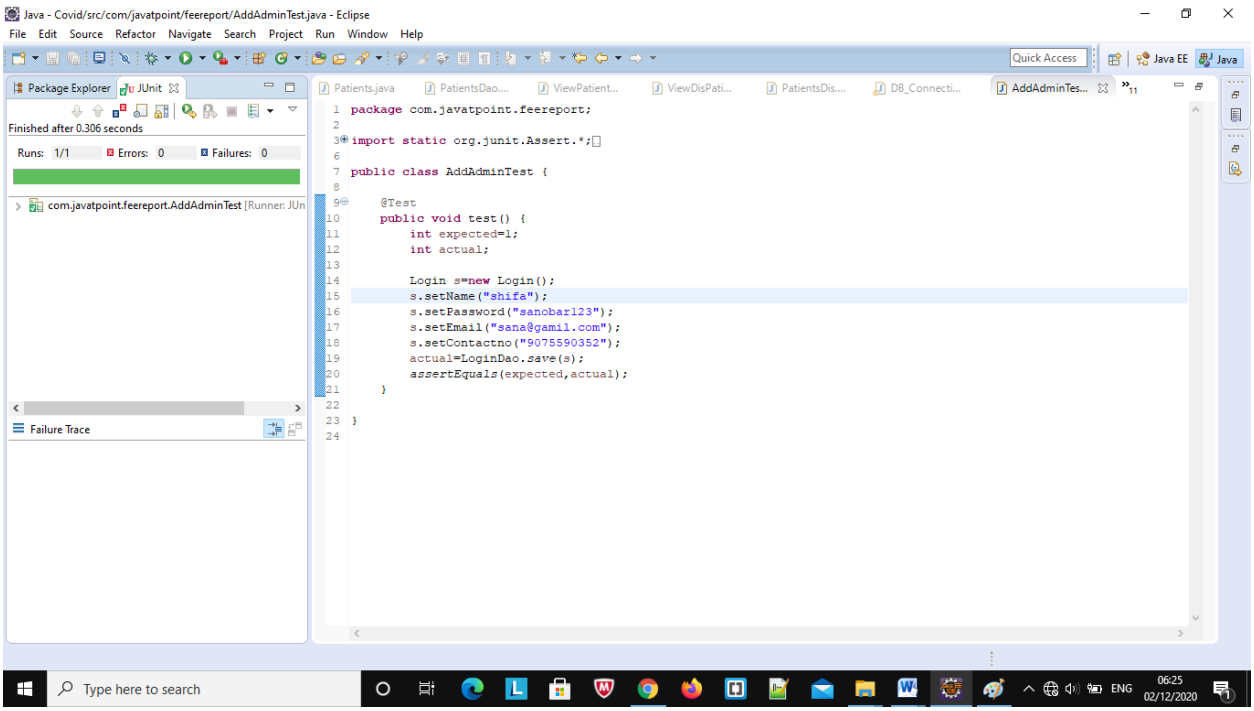
14.Write a code for Test case for calculate total angle inside JunitTest.



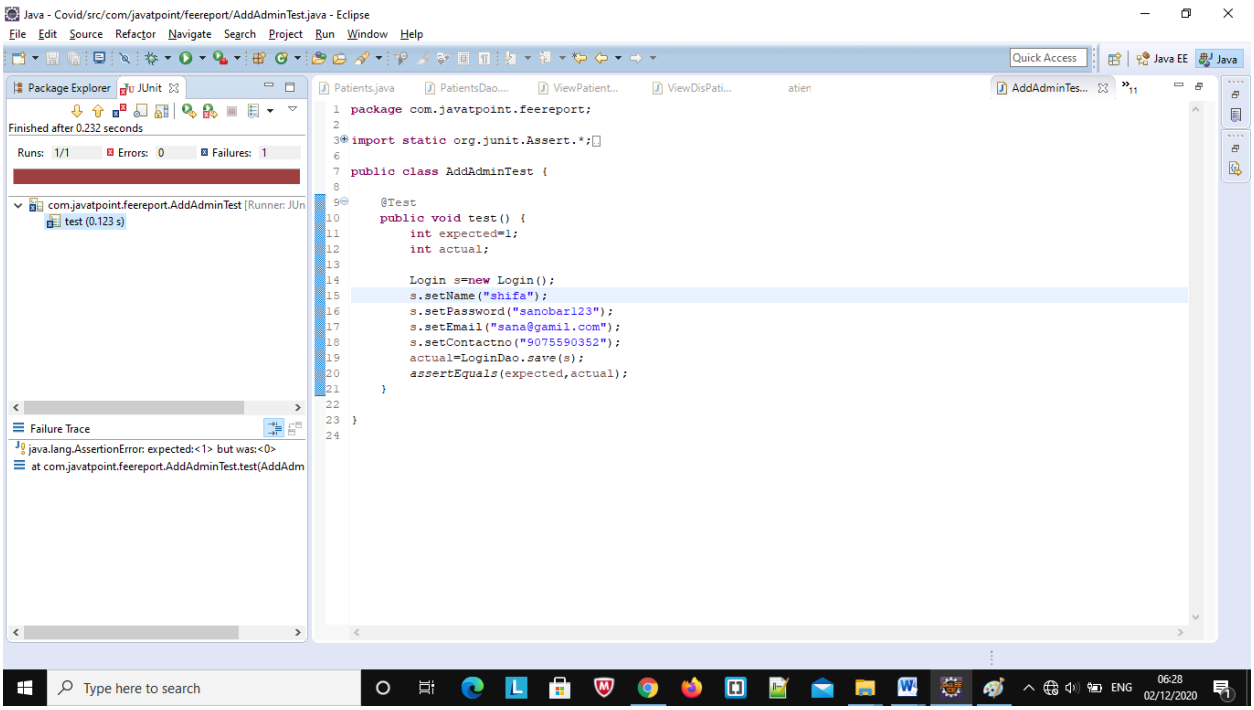
15. Let 4s run Junit_Test test case. Right click Junit_Test-> Debug As->JUnit Test



16 Result of test case is as follows. It shows 0 error and 0 failure and green color test bar which means that test case has run successfully(Green Bar) I



17 Now test case should fail.(Brown Color Bar Indicate) So again run junitTest as follows



FUTURE SCOPE AND CONCLUSION

Future Scope:

In this project we perform multiple test cases to check whether the data is insert correctly or not. Now we have planned to perform the test case to check whether the is inserted data is correctely or not and also perform the testcase to check whether it show the correct output or not.

Conclusion:

By this project we are able to understand Unit and Integration testing with tool with Test Report.