OBject oriented programming with java

Lab manual

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**Course Title:** Object Oriented Programming

**Course Code:**

**Course Outcomes:**

At the end of the course the student should be able to:

1. Apply Object Oriented Programming concepts to solve a given problem.
2. Apply design patterns to design a solution for a given problem.
3. Apply inheritance, polymorphism and exception handling mechanism to implement reusable, robust java programs.
4. Implement user interface java programs for a given scenario.

**List of Practical**

|  |  |  |
| --- | --- | --- |
| **Sr.#** | **Week** | **Topics** |
| 1 | One | Introduction to IDE-NetBeans, Getting Started with Java |
| 2 | Two | Java Basics (Input/output, variable declaration and initialization, strings and arrays) |
| 3 | Three | Java Basics (Selection Structure and Iterative Structure, functions) |
| 4 | Four | OOP (creating classes, objects, constructors) |
| 5 | Five | access modifiers, inheritance |
| 6 | Six | multiple/multilevel inheritance |
| 7 | Seven | Function overriding |
| 8 | Eight | Polymorphism |
| 9 | Nine | abstract classes and interfaces |
| 10 | Ten | exception handling and Java file handling |

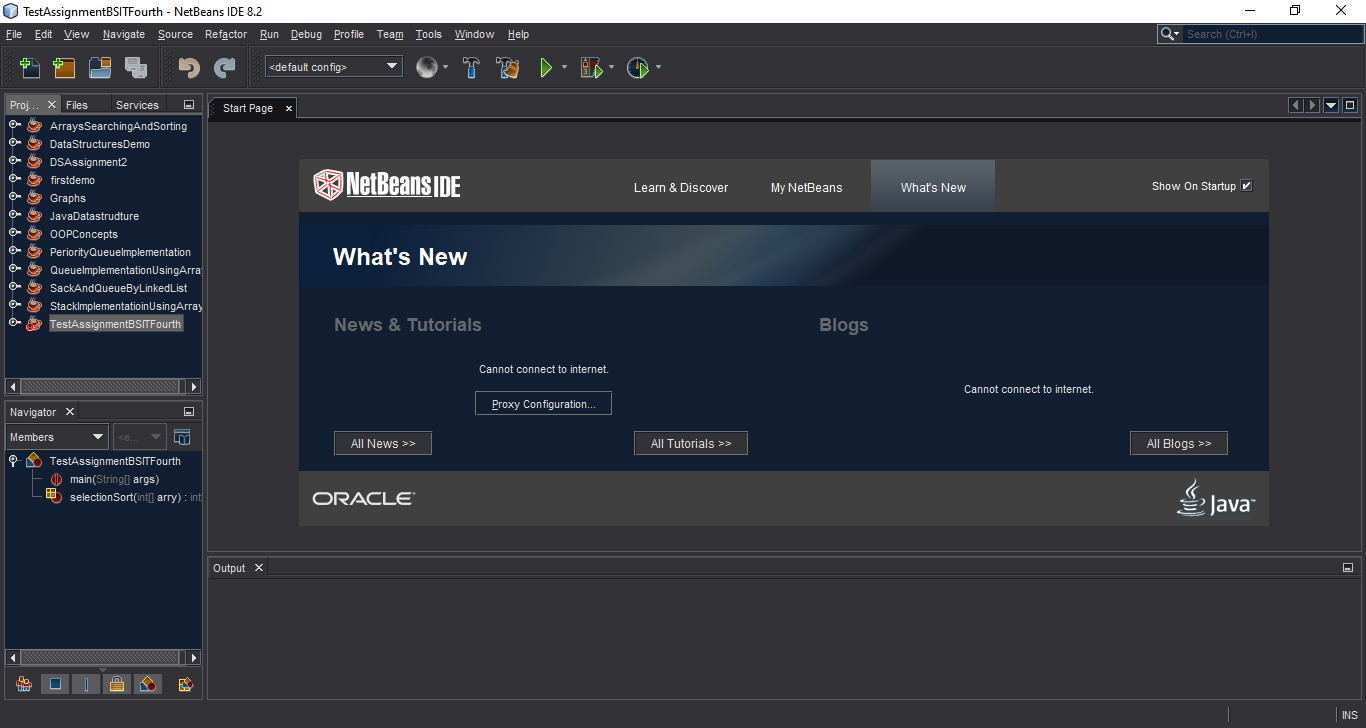
**Introduction to NetBeans and Java**

**LAB-1**

# Download NetBeans

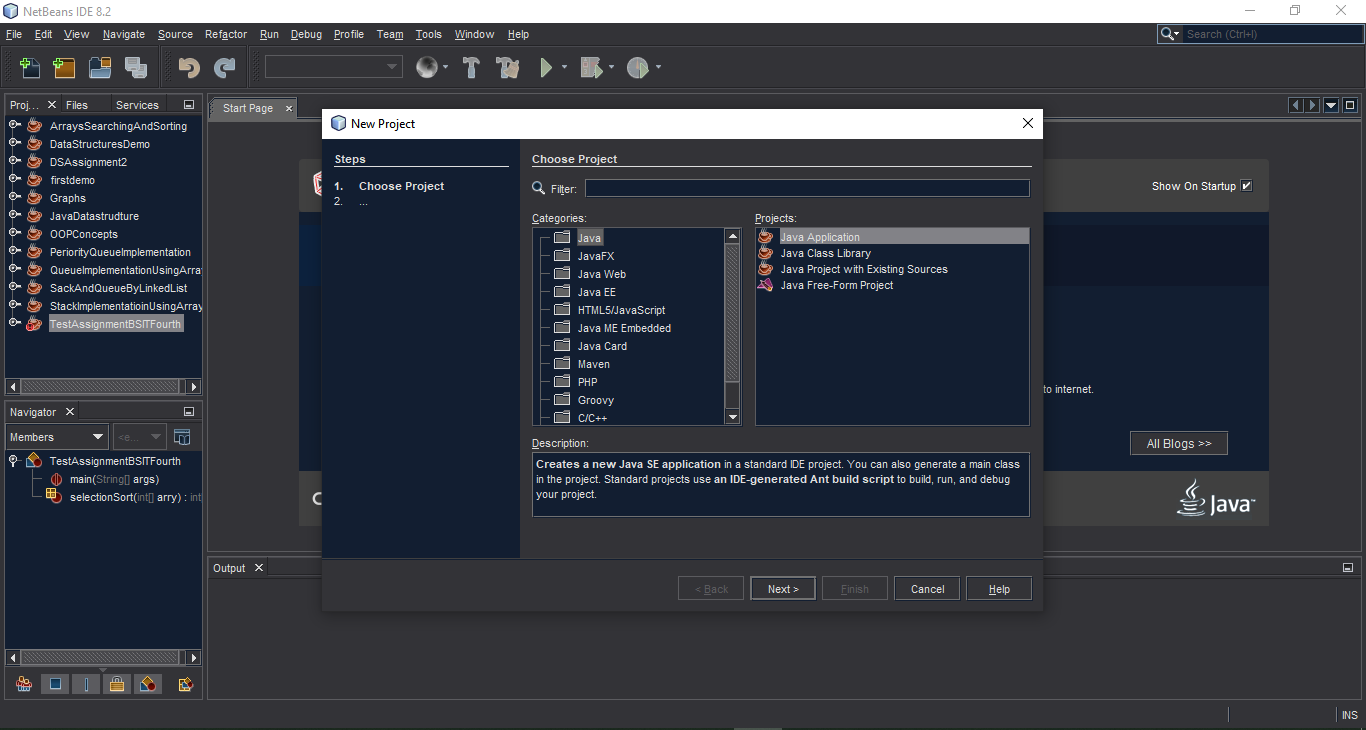
You can download NetBeans from here <https://netbeans.org/>

# NetBeans User interface

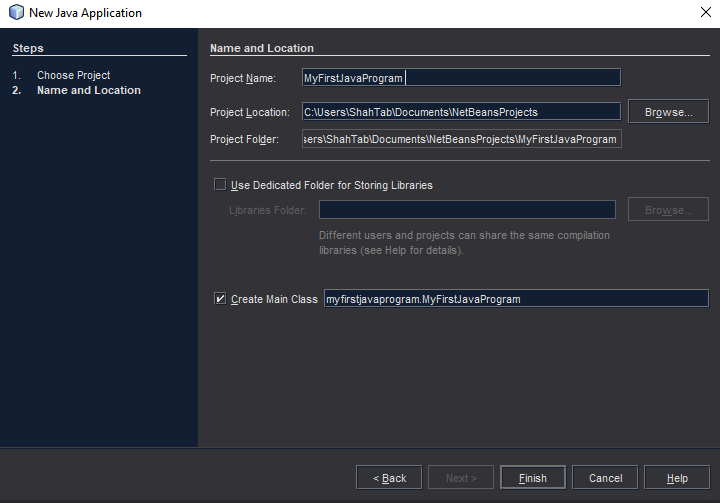


# Creation and Compilation of new Project

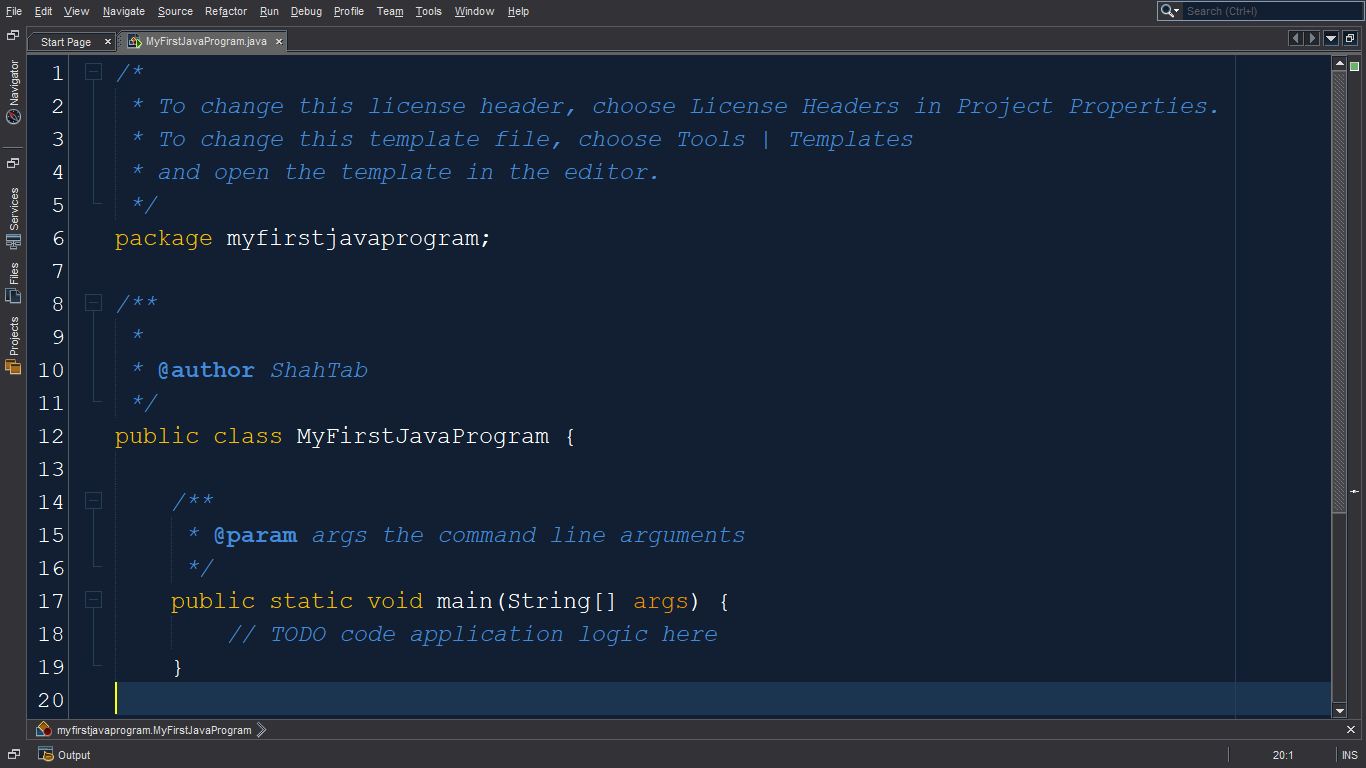
For creating a new project press Ctrl+Shift+N or click on new project



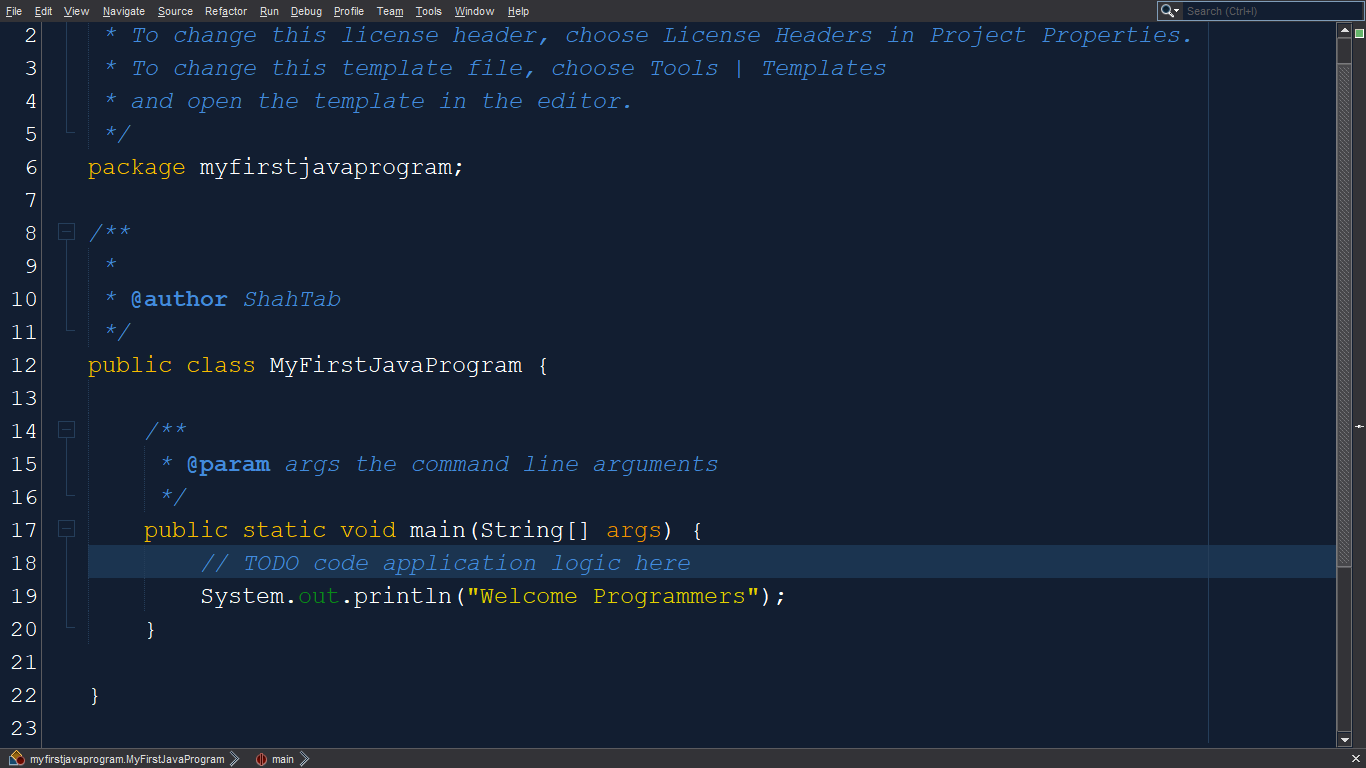
Select Project category Java and project type Java Application then click on next.



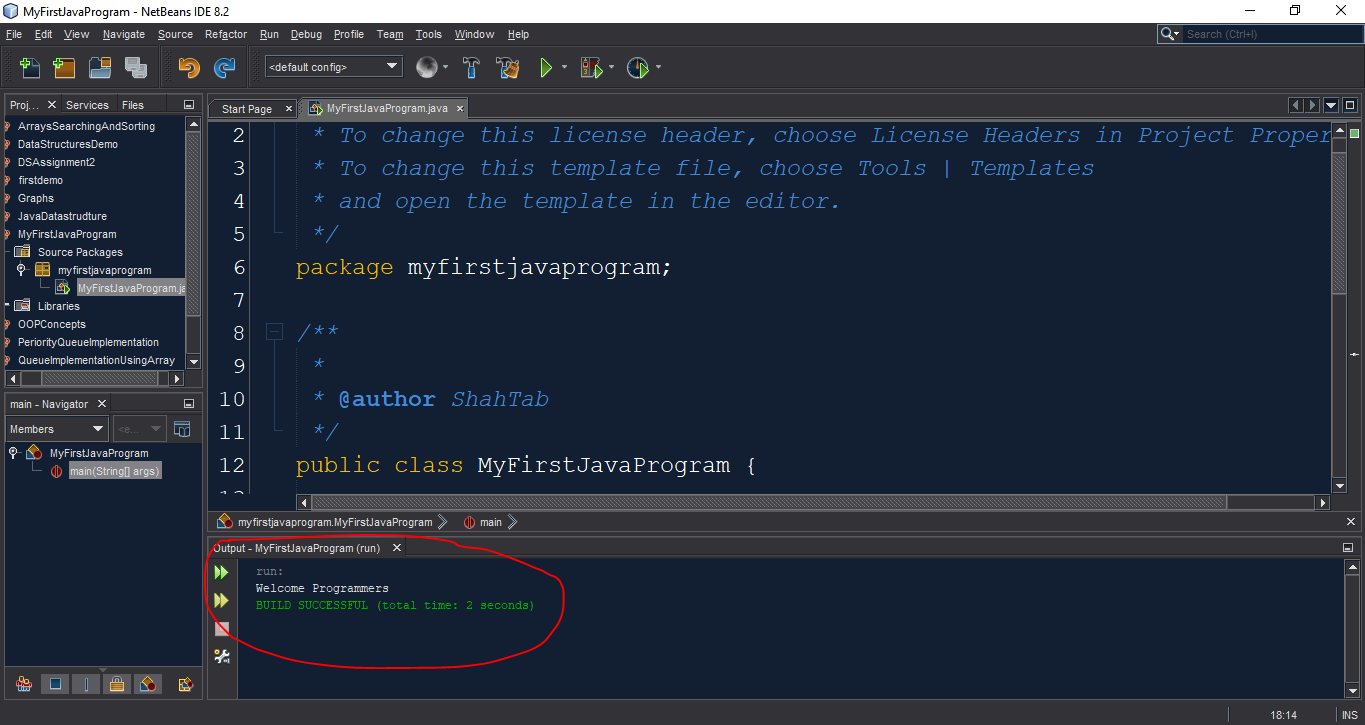
Type project Name “MyFirstJavaProgram” and click on finish.



Now start writing Java code in main function so type System.out.println("Welcome Programmers");



To run project press F6 and see result in output window.



**Task-1**

Download and Install NetBeans.

**Task-2**

Write a program using JAVA for displaying a message “Welcome to DCS&IT” on output window.

**Hint:** print using System.out.println() function.