



# GUI Control I

Key Event 예제

문자 입력

입력 확인





# 학습 목표

■ 이 강의를 마치면 학생들은

- ❖ Label Control Function에 대하여 설명할 수 있다.
- ❖ Button Control Function에 대하여 설명할 수 있다.
- ❖ Text Field Control Function에 대하여 설명할 수 있다.
- ❖ Text Area Control Function에 대하여 설명할 수 있다.





# Label Control (1)

## ■ Label Control

### ❖ Function

◆ 고정 문자열을 표시할 때 사용

### ❖ Constructor

Constructor	Function
Label()	Blank label 생성
Label(String text)	Text가 좌측에 Layout되는 label 생성
Label(String text, int alignment)	Alignment 값에 따라 text가 Layout된 label 생성 Alignment 값 •Label.LEFT •Label.CENTER •Label.RIGHT





# Label Control (2)

## ❖ Method

Method	Function
String getText()	Label의 Text 반환
void setText(String label)	Label에 Text 설정
void setAlignment (int align)	Label의 Text 위치 결정
int getAlignment()	Label의 Text 위치를 반환





# Button Control

## ■ Button Control

### ❖ Function

◆ Button을 생성할 때 사용

### ❖ Constructor

Constructor	Function
Button()	제목없는 Button 생성
Button(String label)	Label로 주어진 문자열 제목의 Button 생성

### ❖ Method

Method	Function
String getLabel()	Button 제목 return
void setLabel(String label)	Button 제목 변경

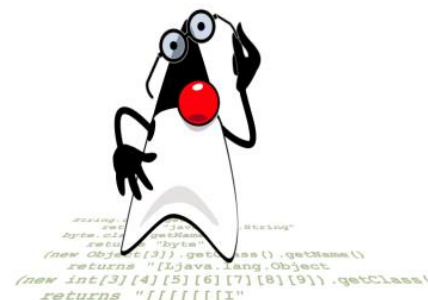
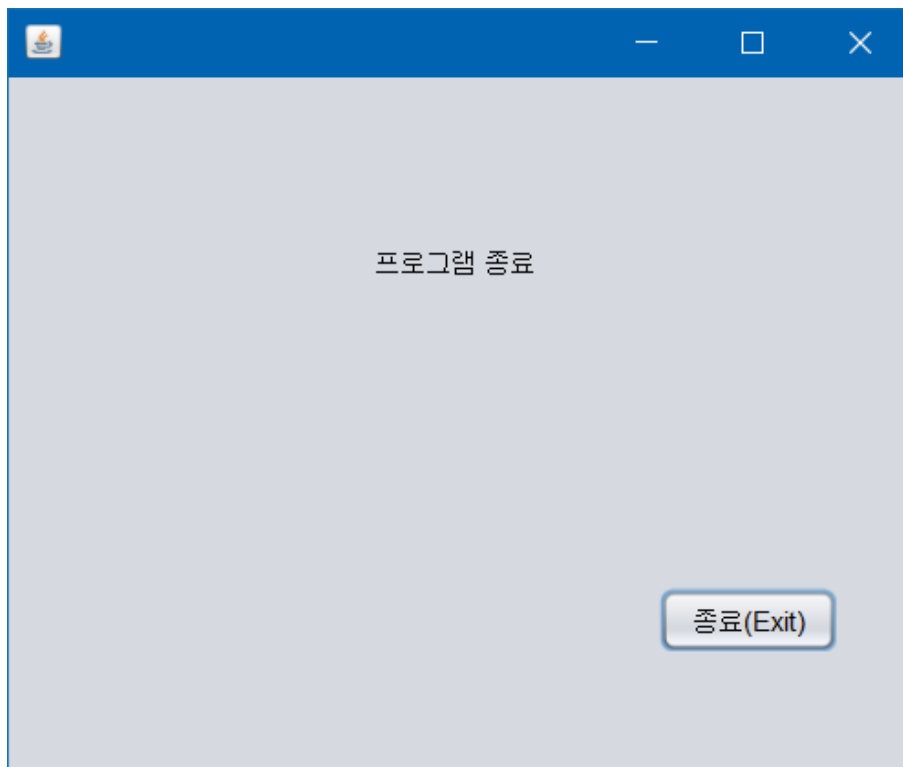




# Practice 1 : Label & Button Control

## ❖ Project Name: LabelButton\_Source (Time : 20 min)

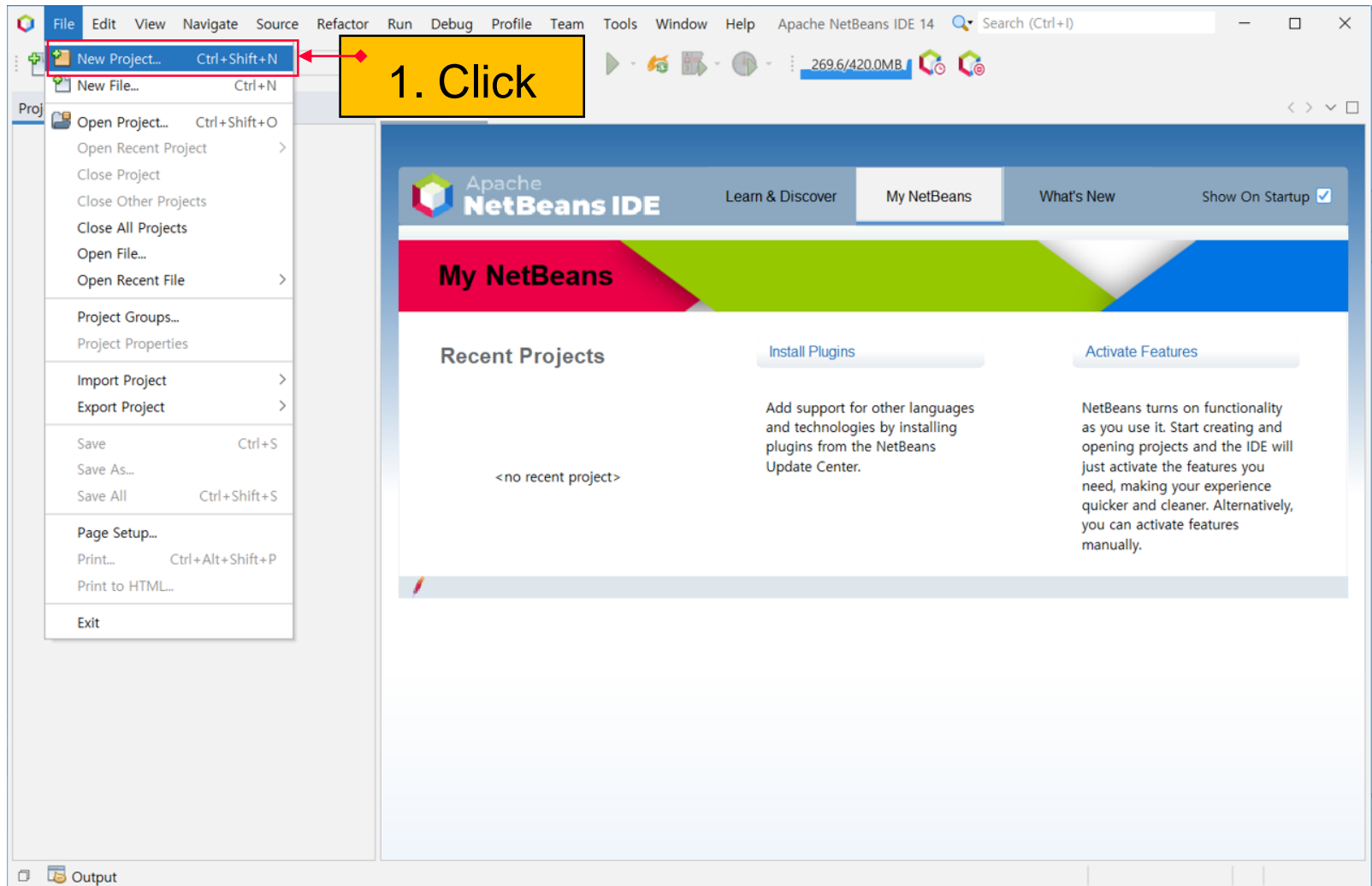
- 종료(Exit) Button을 클릭하면 프로그램이 종료하도록 구현하시오.
  - JLabel Control 추가
  - JButton Control 추가





# Practice 1 : Label & Button Control (1)

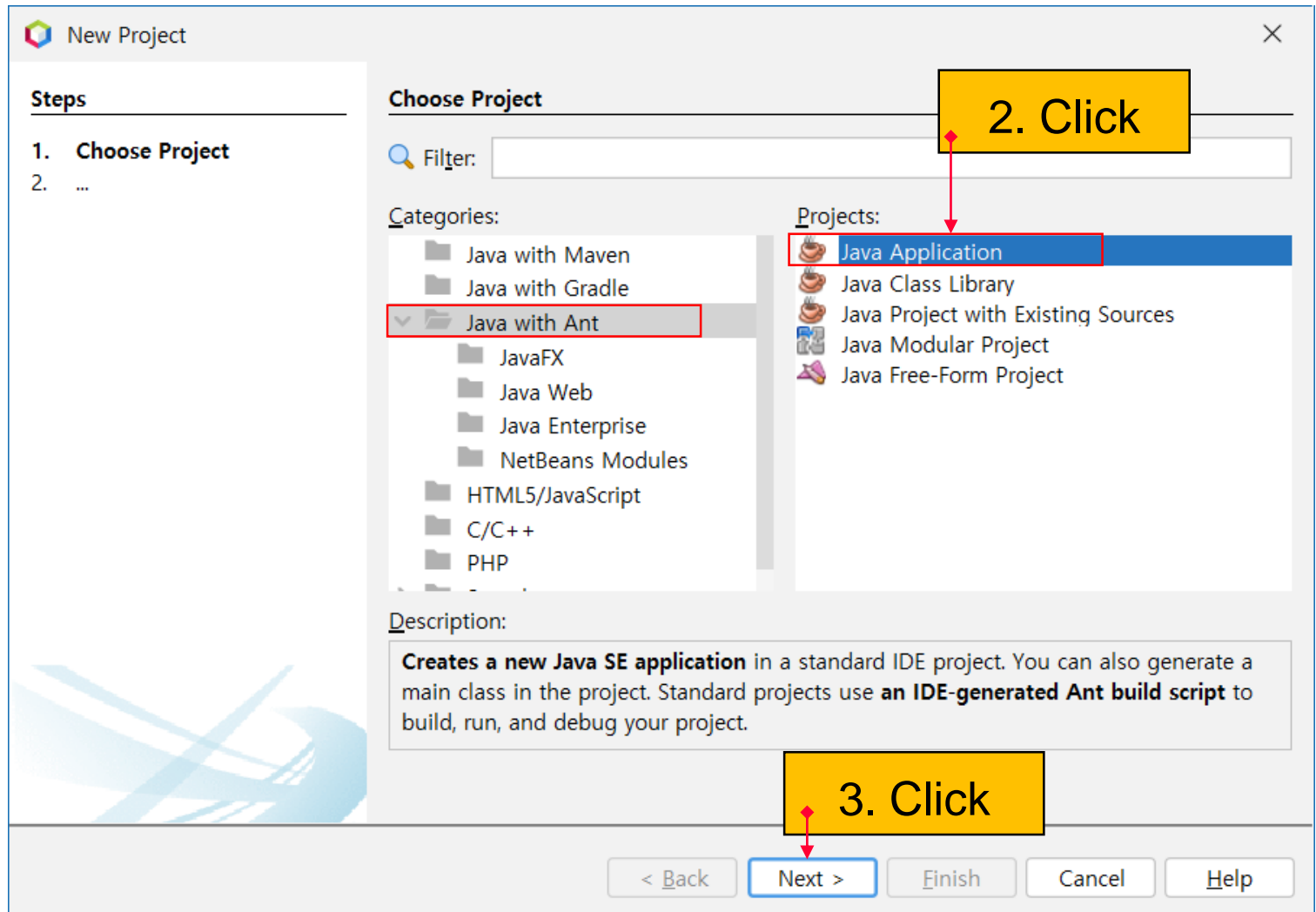
## Create Project





# Practice 1 : Label & Button Control (2)

## Choose Project







# Practice 1 : Label & Button Control (3)

## ■ Project Name and Location

❖ Project name: LabelButton\_Source

The screenshot shows the 'New Java Application' dialog box. On the left, the 'Steps' pane lists '1. Choose Project' and '2. Name and Location'. The 'Name and Location' section contains the following fields and options:

- Project Name:** A text box containing 'LabelButton\_Source'. A yellow callout box labeled '4. Input "LabelButton\_Source"' points to this field.
- Project Location:** A text box containing 'C:\Java\_Project' with a 'Browse...' button to its right.
- Project Folder:** A text box containing 'C:\Java\_Project\LabelButton\_Source'.
- ☐ **Use Dedicated Folder for Storing Libraries**: An unchecked checkbox with a 'Browse...' button to its right.
- ☐ **Create Main Class**: An unchecked checkbox. A yellow callout box labeled '5. Reset check' points to this checkbox. To its right is a text box containing 'labelbutton\_source.LabelButton\_Source'.

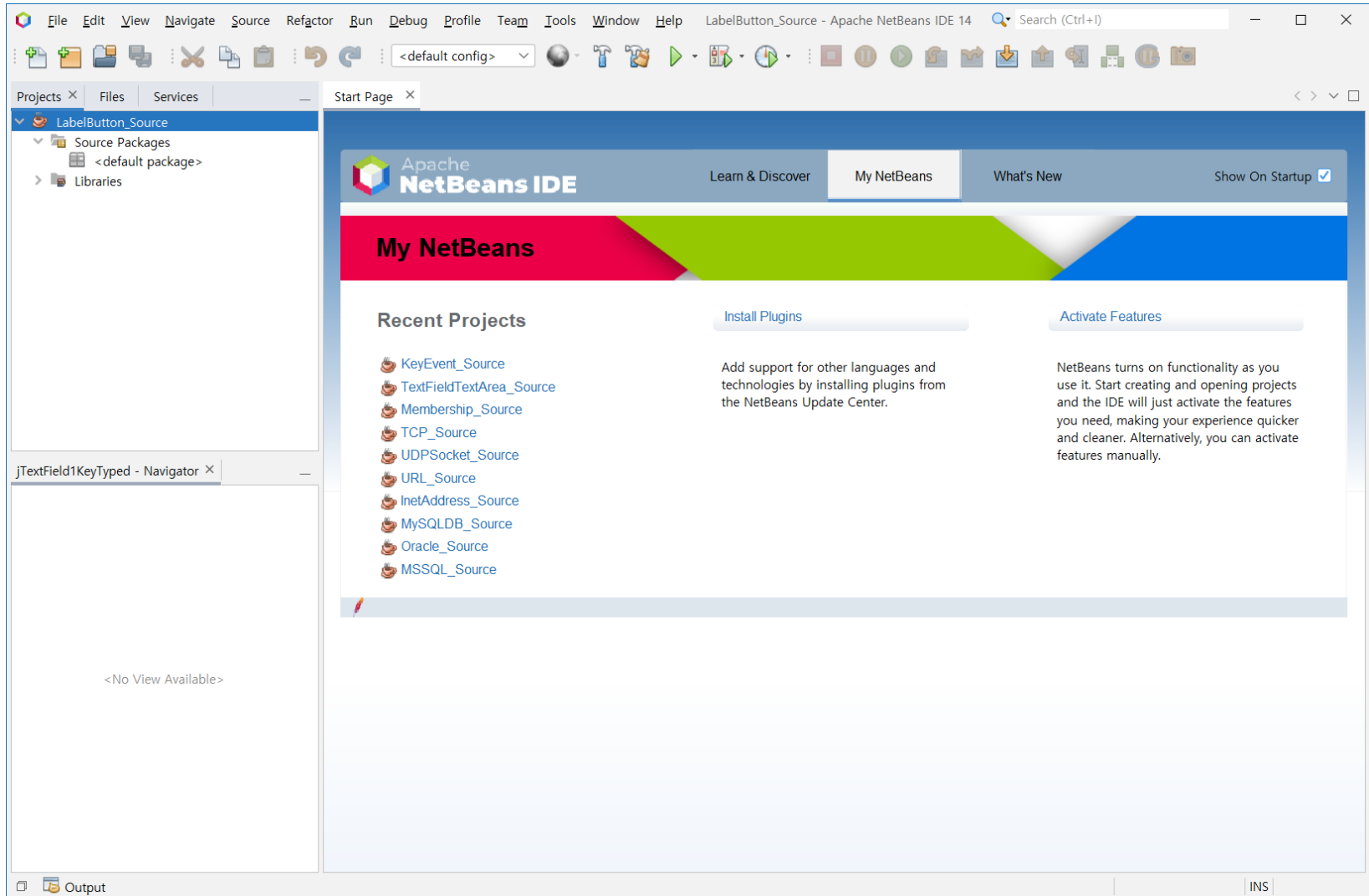
At the bottom of the dialog, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'. A yellow callout box labeled '6. Click' points to the 'Finish' button.





# Practice 1 : Label & Button Control (4)

## Create project success

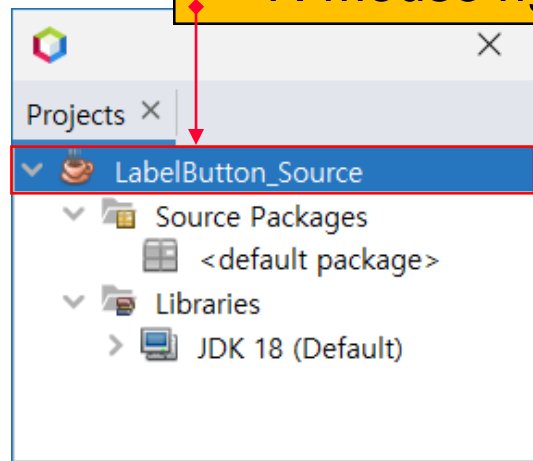




# Practice 1 : Label & Button Control (5)

## Create JFrame Form

7. Mouse right-button Click



New

Build  
Clean and Build

8. Click

Run  
Debug  
Profile  
Test  
Set Configuration

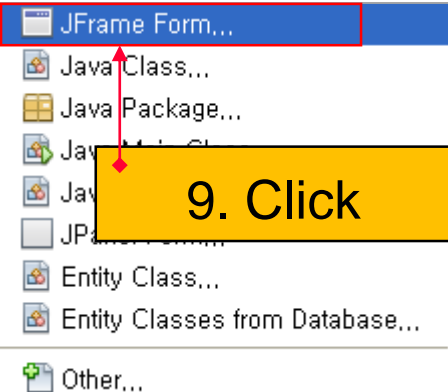
Set as Main Project  
Open Required Projects  
Close

Rename...  
Move...  
Copy...  
Delete

Find...  
Versioning  
Local History

Properties

9. Click





# Practice 1 : Label & Button Control (6)

## ■ Setting Class Name

❖ Mainframe.java 생성

New JFrame Form

**Steps**

1. Choose File Type
2. Name and Location

**Name and Location**

Class Name: MainFrame

Project: LabelButton\_Source

Location: Source Packages

Package:

Created File: C:\Java\_Project\LabelButton\_Source\src\MainFrame.java

**Projects**

- LabelButton\_Source
  - Source Packages
    - <default package>
    - MainFrame.java
  - Libraries
    - JDK 18 (Default)

10. Input "MainFrame"

11. Click

Finish



# Practice 1 : Label & Button Control (7)

## Create JFrame form success

The screenshot displays the Apache NetBeans IDE interface for a project named 'LabelButton\_Source'. The central workspace shows a 'Design' view of a 'MainFrame.java' window, represented by a large, empty rectangular box. A red double-headed arrow points from a green box labeled 'JFrame Form' below to this box. The left sidebar contains a 'Projects' view showing the project structure and a 'Navigator' view showing the 'MainFrame : JFrame' class with methods 'MainFrame()', 'initComponents()', and 'main(String[] args)'. The right sidebar features a 'Palette' of Swing components and a 'Properties' window for 'MainFrame.java'. The 'Swing Controls' section lists various components like Label, Toggle Button, Radio Button, Combo Box, Text Field, Scroll Bar, Progress Bar, Password Field, Separator, Editor Pane, Table, Button, Check Box, Button Group, List, Text Area, Slider, Formatted Field, Spinner, Text Pane, and Tree. The 'Swing Menus' section lists Menu Bar, Menu, Menu Item, Menu Item / CheckBox, Menu Item / RadioButton, Popup Menu, and Separator. The 'Properties' window shows details for 'MainFrame', including Name, Extension (java), File Size (3228), Modification Time (2022. 8. 9. 오전 11:15:29), All Files (C:\Java\_Project\Lab...), Classpaths, Compile Classpath, Runtime Classpath (C:\Java\_Project\Lab...), and Boot Classpath (nbjrtfile/C:/Program...).





# Practice 1 : Label & Button Control (8)

## Control Layout & Property Setting

### ❖ Layout

◆ Label

◆ Button

12. Drag & Drop

13. Drag & Drop

Palette ×

- Swing Containers
- Swing Controls
  - Label
  - Check Box
  - Combo Box
  - Text Area
  - Progress Bar
  - Spinner
  - Editor Pane
  - OK Button
  - Radio Button
  - List
  - Scroll Bar
  - Formatted Field
  - Separator
  - Tree
  - Toggle Button
  - Button Group
  - Text Field
  - Slider
  - Password Field
  - Text Pane
  - Table



# Practice 1 : Label & Button Control (9)

## ❖ MainFrame.java Source Code

```
MainFrame.java - Editor
MainFrame.java x
Source Design History
1
2 public class MainFrame extends javax.swing.JFrame {
3
4     public MainFrame() {
5         initComponents();
6     }
7
8     @SuppressWarnings("unchecked")
9     Generated Code
47
48 public static void main(String args[]) {
49
50     /* Create and display the form */
51     java.awt.EventQueue.invokeLater(new Runnable() {
52         public void run() {
53             new MainFrame().setVisible(true);
54         }
55     });
56 }
57
58 // Variables declaration - do not modify
59 private javax.swing.JButton jButton1;
60 private javax.swing.JLabel jLabel1;
61 // End of variables declaration
62 }
```

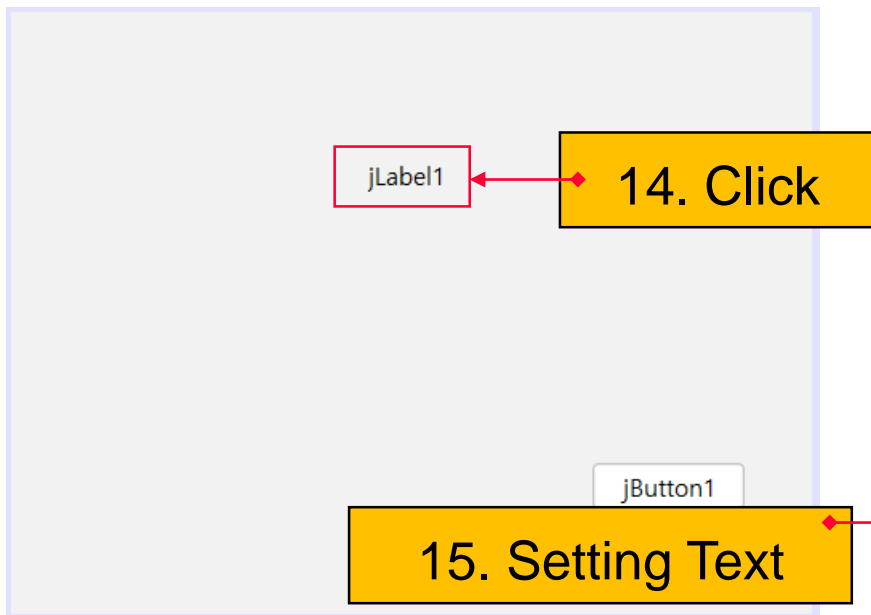
Label , Button 변수 선언



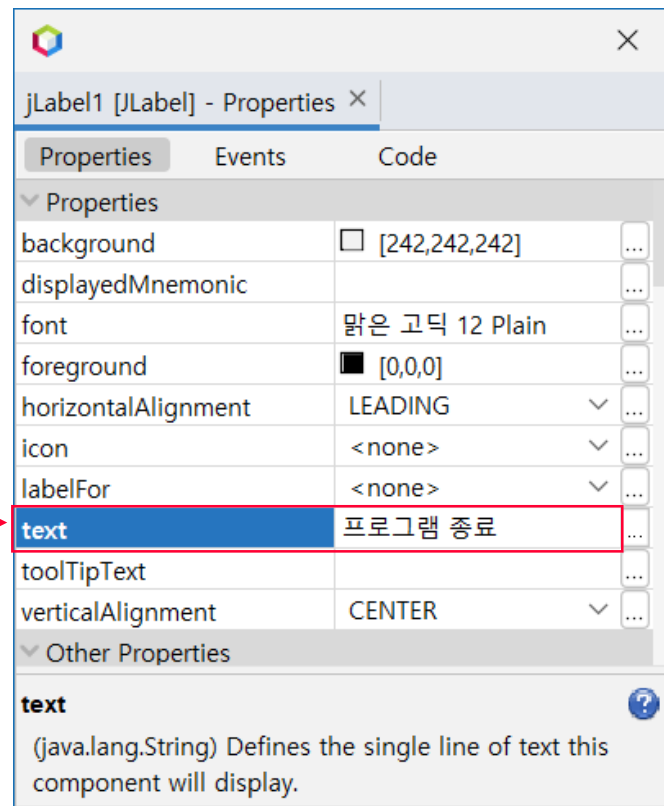


# Practice 1 : Label & Button Control (10)

## ❖ Label 속성 지정



Control	Property Setting
Label	•Text: 프로그램 종료





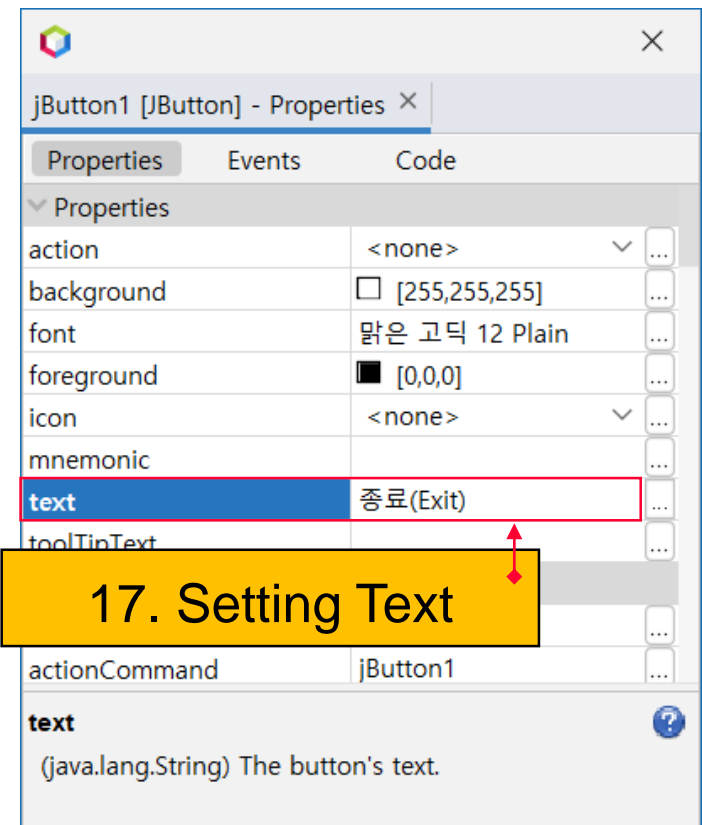


# Practice 1 : Label & Button Control (11)

## ❖ Button 속성 지정



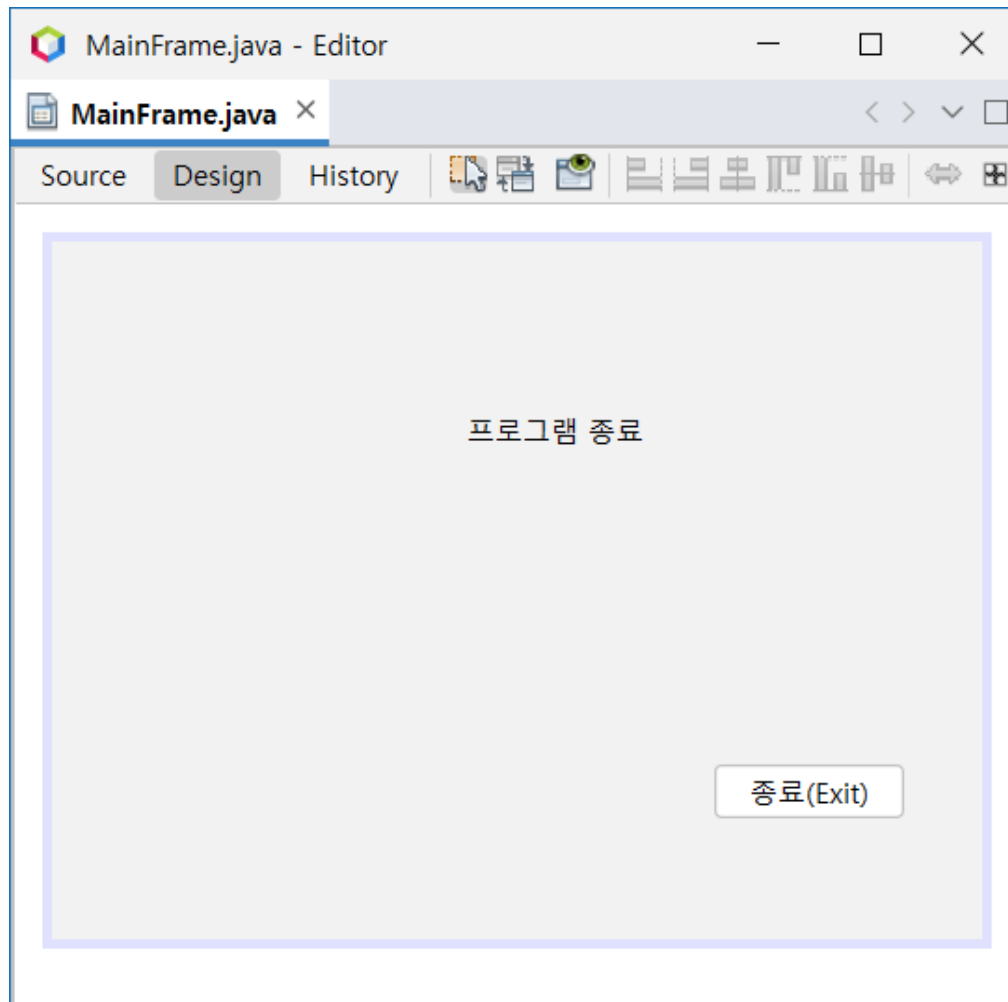
Control	Property Setting
Button	•Text: 종료(Exit)





# Practice 1 : Label & Button Control (12)

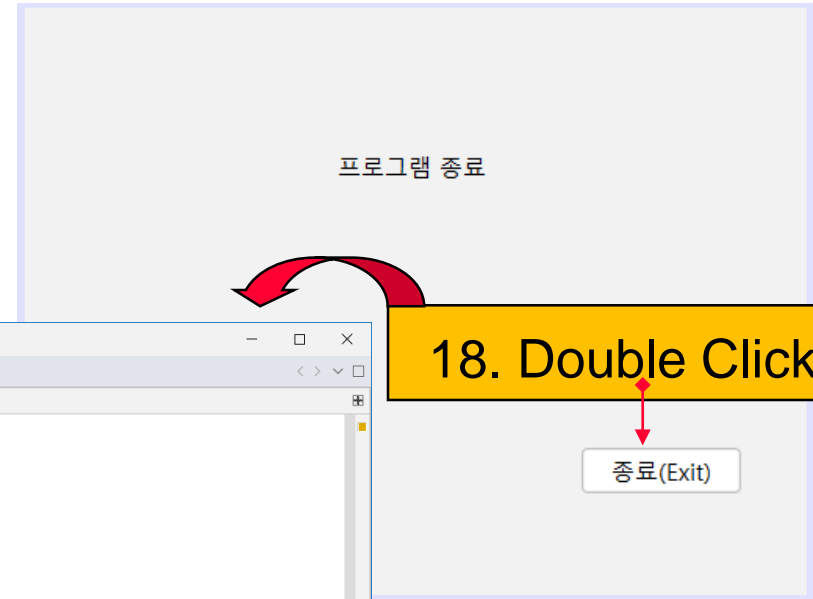
## ■ GUI 구현 완료





# Practice 1 : Label & Button Control (13)

## ■ [종료(Exit)] Button Event Handler 구현



18. Double Click

종료(Exit)

```
MainFrame.java - Editor
MainFrame.java x
Source Design History
1 public class MainFrame extends javax.swing.JFrame {
2
3
4 public MainFrame() {...3 lines }
7
8 @SuppressWarnings("unchecked")
9 Generated Code
51
52 private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
53 // TODO add your handling code here:
54 System.exit(0); //Application Exit
55 }
56
57 public static void main(String args[]) {...9 lines }
66
67 // Variables declaration - do not modify
68 private javax.swing.JButton jButton1;
69 private javax.swing.JLabel jLabel1;
70 // End of variables declaration
71 }
```

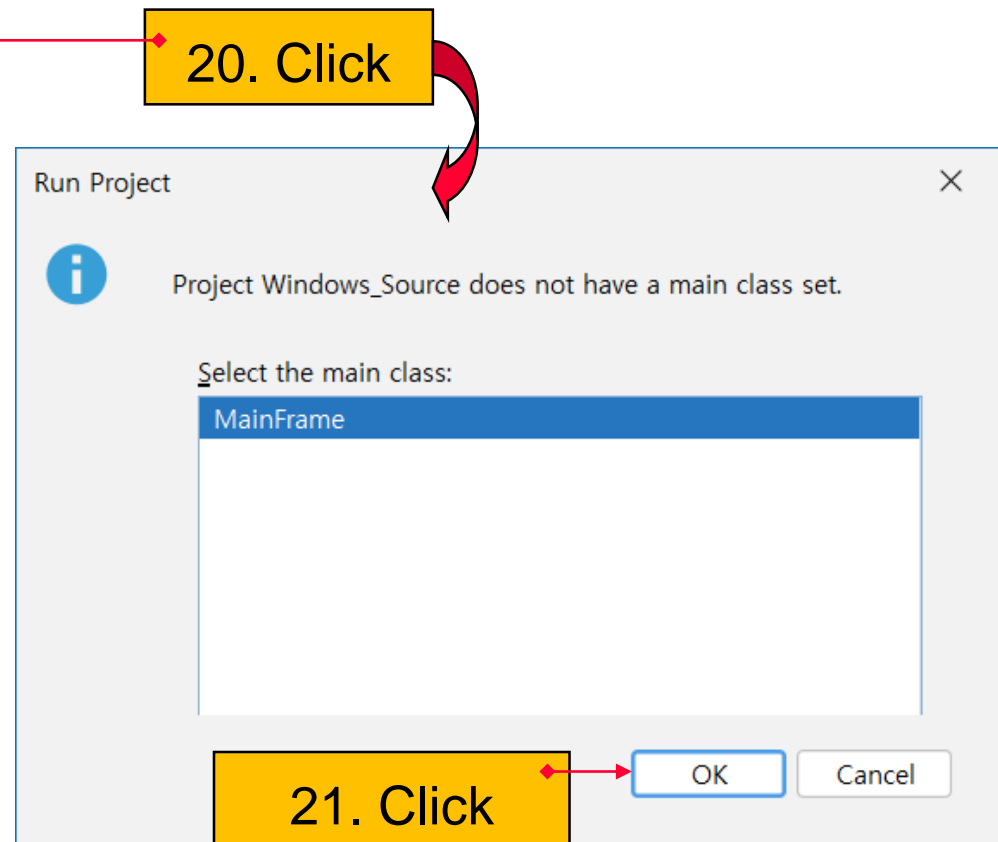
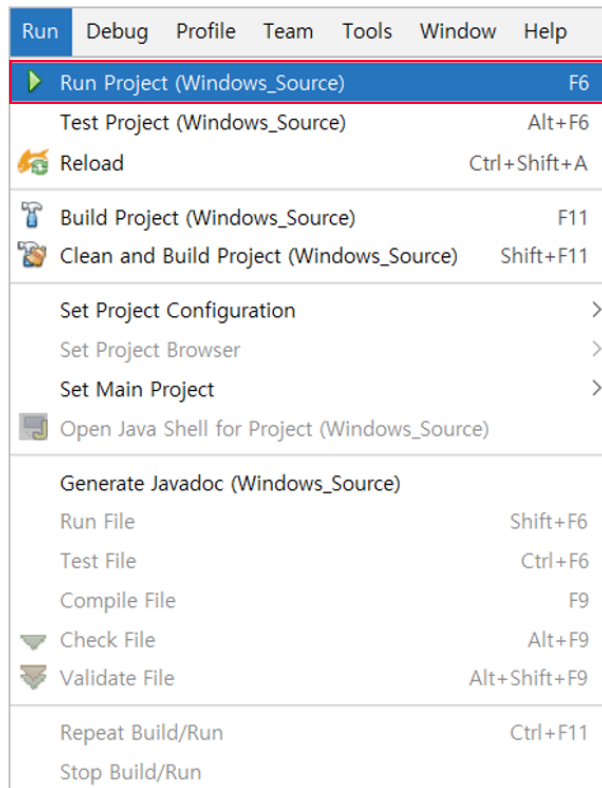
19. Coding





# Practice 1 : Label & Button Control (14)

## Run





# Practice 1 : Label & Button Control (15)

❖ 종료(Exit) Button Click

◆ 프로그램 종료





# Text Field Control

## ■ TextField Control

### ❖ Function

◆ 단일 문자열 입력

### ❖ 형식

```
TextField strInput = new TextField(str, size)
```

str	Textfield에 표시될 기본 문자열
size	Textfield 크기

### ❖ Method

Method	Function
public String getText()	입력된 문자열 반환
void setText(String str)	문자열 str을 TextField에 지정
public String getSelectedText()	선택된 문자열 반환
public void setEditable(boolean b)	TextField에 입력 여부 결정(true/false)





# Text Area Control

## ■ TextArea Control

### ❖ Function

◆ 다중 문자열 입력

### ❖ 형식

```
TextArea strInput = new TextArea(str, rows, cols)
```

str	TextArea에 표시될 기본 문자열
rows	Row
cols	Column

### ❖ Method

Method	Function
void append(String str)	기존의 문자열에 str 문자열 추가
int getColumns	Column 수 반환
int getRows	Row 수 반환





## Practice 2 : Text Field & Text Area Control

### ❖ Project Name: TextFieldTextArea\_Source (Time: 20 min)

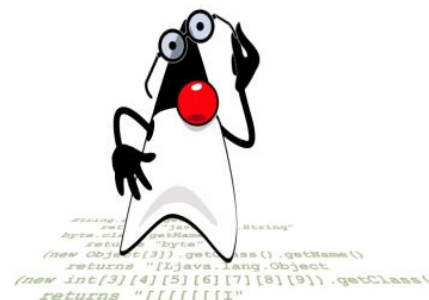
- 한 줄 입력 TextField에 문자열 입력
- 입력(Input) Button Click
- 다중 라인 입력 TextArea의 문자열에 한 줄 입력 TextField의 문자열을 추가 한다.

TextField 및 TextArea 예제

한 줄 입력 재미있다.

입력 (Input)

다중 라인 입력 Java  
재미있다.







# Practice 2 : Text Field & Text Area Control (1)

## Create Project

1. Click

2. Click

3. Click

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help Apache NetBeans IDE 14 Search (Ctrl+I)

New Project... Ctrl+Shift+N

New File... Ctrl+N

Open Project... Ctrl+Shift+O

Open Recent Project >

Close Project

Close Other Projects

Close All Projects

Open File...

Open Recent File >

Project Groups...

Project Properties

Import Project >

Export Project >

Save Ctrl+S

Save As...

Save All Ctrl+Shift+S

Page Setup...

Print... Ctrl+Alt+Shift+P

Print to HTML...

Exit

New Project

Steps

1. Choose Project
2. ...

Choose Project

Filter:

Categories:

- Java with Maven
- Java with Gradle
- Java with Ant
- JavaFX
- Java Web
- Java Enterprise
- NetBeans Modules
- HTML5/JavaScript
- C/C++
- PHP

Projects:

- Java Application
- Java Class Library
- Java Project with Existing Sources
- Java Modular Project
- Java Free-Form Project

Description:

**Creates a new Java SE application** in a standard IDE project. You can also generate a main class in the project. Standard projects use **an IDE-generated Ant build script** to build, run, and debug your project.

< Back Next > Finish Cancel Help





# Practice 2 : Text Field & Text Area Control (2)

## ■ Project Name and Location

❖ Project name: TextFieldTextArea\_Source

New Java Application

**Steps**

1. Choose Project
2. **Name and Location**

**Name and Location**

Project Name: TextFieldTextArea\_Source

Project Location: C:\Java\_Project Browse...

Project Folder: C:\Java\_Project\TextFieldTextArea\_Source

☐ Use Dedicated Folder for Storing Libraries

Libraries Folder: Browse...

Different users and projects can share the same compilation libraries (see Help for details).

☒ Create Main Class textfieldtextarea\_source.TextFieldTextArea\_Source

5. Reset check

4. Input "TextFieldTextArea\_Source"

6. Click

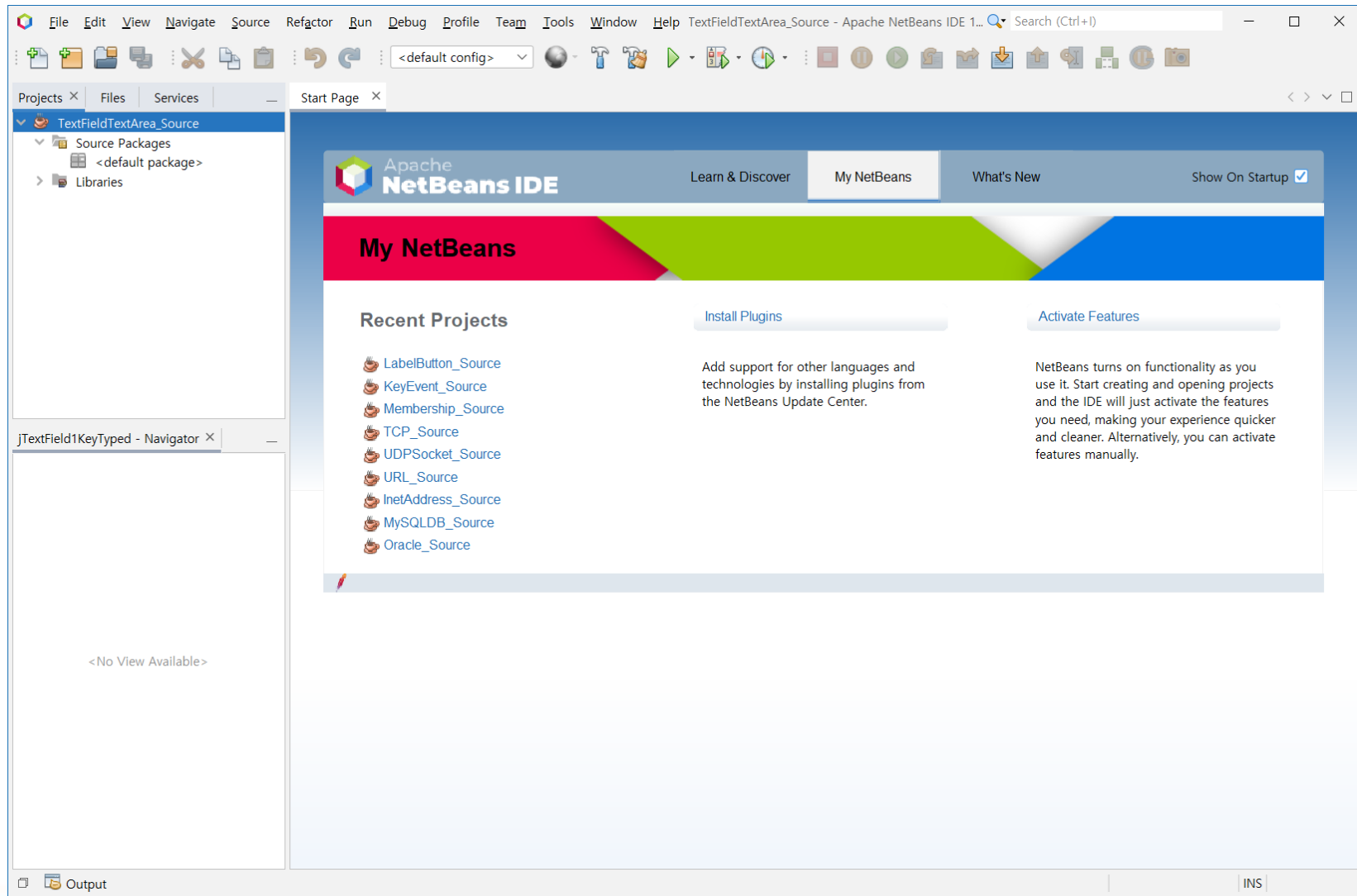
< Back Next > Finish Cancel Help





# Practice 2 : Text Field & Text Area Control (3)

## Create project success





## Practice 2 : Text Field & Text Area Control (4)

### ■ Create JFrame Form

7. Mouse right-button Click

8. Click

9. Click

Projects X

TextFieldTextArea\_Source

- Source Packages
  - <default package>
- Libraries
  - JDK 18 (Default)

New

- Build
- Clean and Build
- Run
- Debug
- Profile
- Test Alt+F6
- Set Configuration
- Set as Main Project
- Open Required Projects
- Close
- Rename...
- Move...
- Copy...
- Delete Delete
- Find... Ctrl+F
- Versioning
- Local History
- Properties

JFrame Form...

- Java Class...
- Java Package...
- Java Module...
- Java Project...
- JSP Project...
- Entity Class...
- Entity Classes from Database...
- Other...





# Practice 2 : Text Field & Text Area Control (5)

## ■ Setting Class Name

❖ Mainframe.java 생성

New JFrame Form

**Steps**

1. Choose File Type
2. Name and Location

**Name and Location**

Class Name: MainFrame

Project: TextFieldTextArea\_Source

Location: Source Packages

Package:

Created File: C:\Java\_Project\TextFieldTextArea\_Source\src\MainFrame.java

**Projects**

- LabelButton\_Source
  - Source Packages
    - <default package>
      - MainFrame.java
- Libraries
  - JDK 18 (Default)

10. Input "MainFrame"

11. Click

Warning: It is highly recommended that you do not place Java classes in the default package

< Back Next > Finish Cancel Help



# Practice 2 : Text Field & Text Area Control (6)

## Create JFrame form success

The screenshot displays the Apache NetBeans IDE interface. The main editor window shows a large, empty rectangular area representing the JFrame form. A red double-headed arrow points from a green box labeled "JFrame Form" to this area. The left sidebar contains the "Projects" and "Navigator" panels. The "Projects" panel shows the project structure: "TextFieldTextArea\_Source" > "Source Packages" > "<default package>" > "MainFrame.java". The "Navigator" panel shows the "MainFrame : JFrame" class with methods "MainFrame()", "initComponents()", and "main(String[] args)". The right sidebar contains the "Palette" and "Properties" panels. The "Palette" panel shows various Swing controls under "Swing Containers" and "Swing Menus". The "Properties" panel shows the properties of the "MainFrame" class, including "Name", "Extension", "File Size", "Modification Time", "All Files", "Classpaths", "Compile Classpath", "Runtime Classpath", and "Boot Classpath".

Projects: TextFieldTextArea\_Source

- Source Packages
  - <default package>
    - MainFrame.java
- Libraries
  - JDK 18 (Default)

Navigator: Members

- MainFrame : JFrame
  - MainFrame()
  - initComponents()
  - main(String[] args)

Palette: Swing Containers

- Swing Controls
  - Label
  - Toggle Button
  - Radio Button
  - Combo Box
  - Text Field
  - Scroll Bar
  - Progress Bar
  - Password Field
  - Separator
  - Editor Pane
  - Table
  - Button
  - Check Box
  - Button Group
  - List
  - Text Area
  - Slider
  - Formatted Field
  - Spinner
  - Text Pane
  - Tree
- Swing Menus
  - Menu Bar
  - Menu
  - Menu Item
  - Menu Item / CheckBox
  - Menu Item / RadioButton
  - Popup Menu
  - Separator

MainFrame.java - Properties

Properties

Property	Value
Name	MainFrame
Extension	java
File Size	3228
Modification Time	2022. 8. 9. 오후 12:22:15
All Files	C:\Java_Project\WText...
Classpaths	
Compile Classpath	
Runtime Classpath	C:\Java_Project\WText...
Boot Classpath	nbjrtfile/C:/Program...

MainFrame.java



# Practice 2 : Text Field & Text Area Control (7)

## ■ Control Layout & Setting Property

TextField 및 TextArea 예제

한 줄 입력

다중 라인 입력

입력(Input)

Control	Properties Setting
jLabel1	• Text: TextField 및 TextArea 예제
jLabel2	• Text: 한 줄 입력
jLabel3	• Text: 다중 입력
jTextField1	• Text:
jTextArea1	• Text:
jButton1	• Text: 입력(Input)





# Practice 2 : Text Field & Text Area Control (8)

## ❖ 입력(Input) Button Event Handler

```
MainFrame.java - Editor
MainFrame.java x
Source Design History
1 public class MainFrame extends javax.swing.JFrame {
2
3     public MainFrame() {
4         initComponents();
5     }
6
7     @SuppressWarnings("unchecked")
8     Generated Code
84
86     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
87         String strCRLF = "\n"; //CR + LF(\n)
88         String strData = null; //String variable
89         strData = jTextArea1.getText(); //TextArea -> strData
90         strData += jTextField1.getText() + strCRLF; //TextField -> strData
91         jTextArea1.setText(strData); //sreData -> TextArea
92
93     }
94
95     public static void main(String args[]) {...8 lines }
103
```

12. Coding

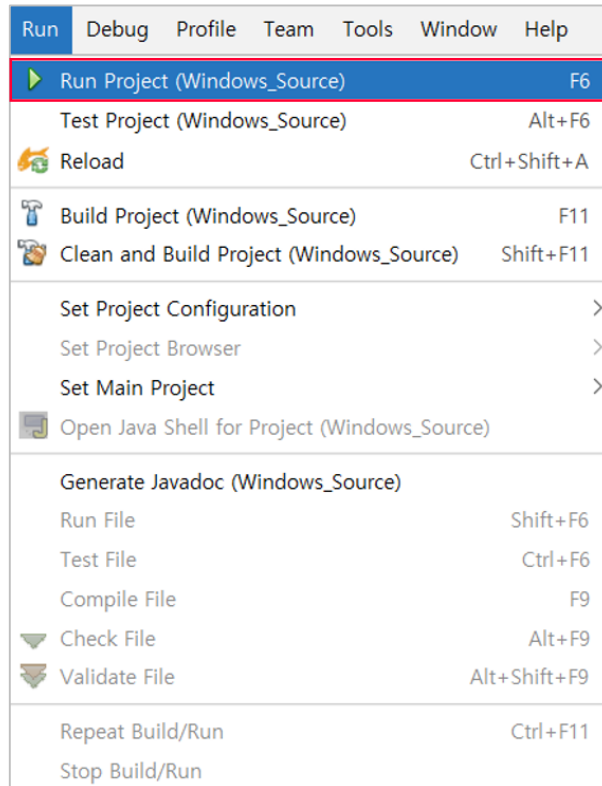




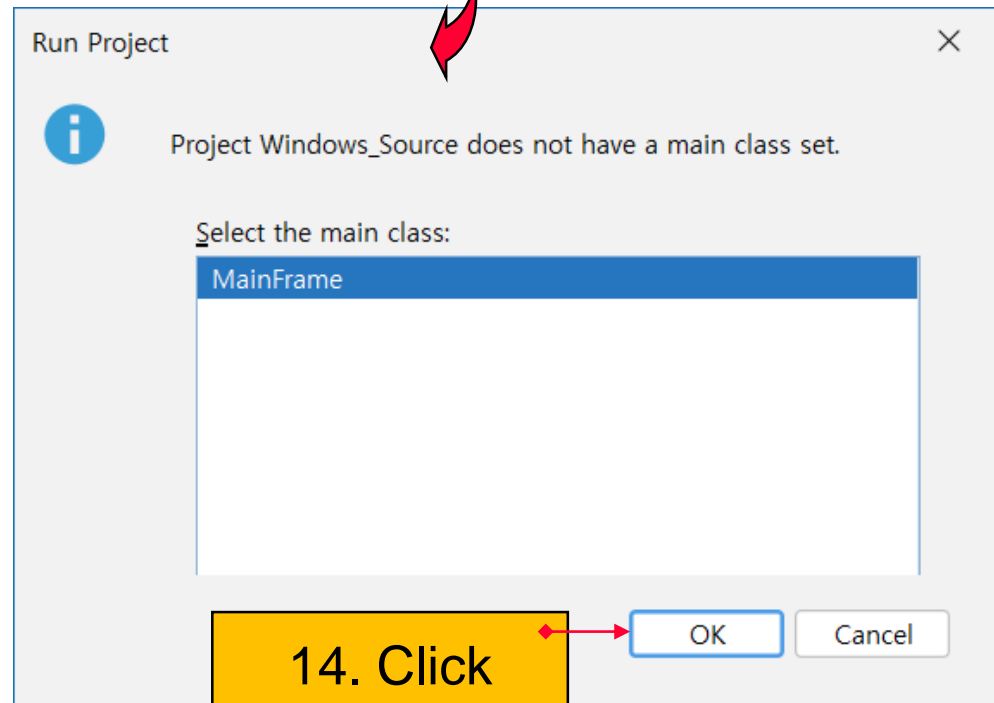


# Practice 2 : Text Field & Text Area Control (9)

## Run



13. Click



14. Click





## Practice 2 : Text Field & Text Area Control (10)

■ Run

❖ 입력(Input) Button Click

◆ 한 줄 입력 문자열 -> 다중 라인 입력 문자열에 추가

TextField 및 TextArea 예제

한 줄 입력

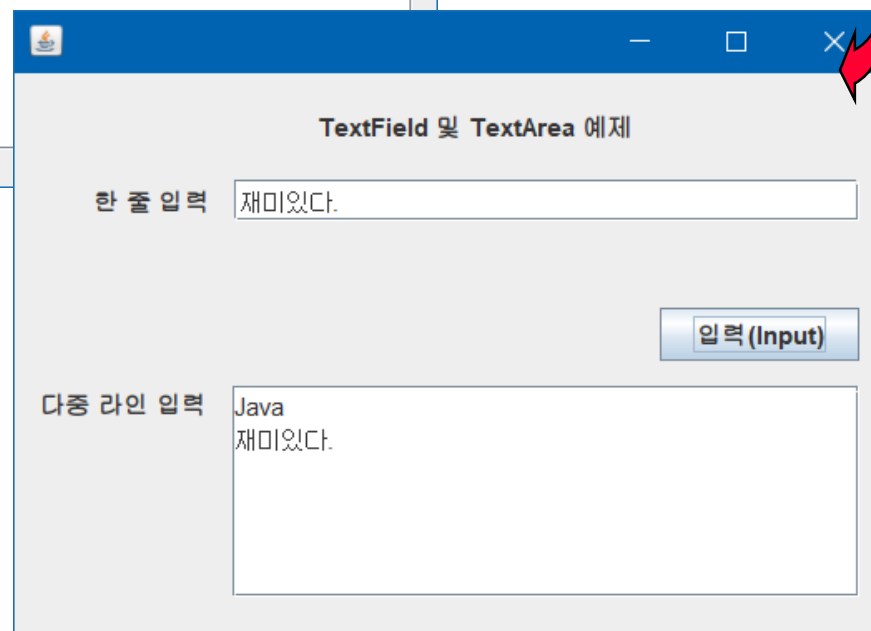
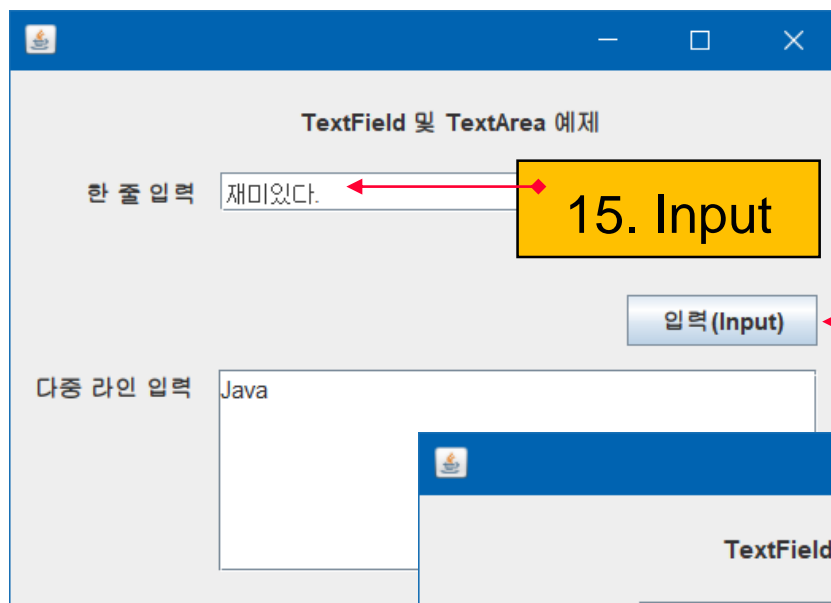
다중 라인 입력

입력 (Input)





# Practice 2 : Text Field & Text Area Control (11)





## Practice 3 : Text Field & Text Area Control

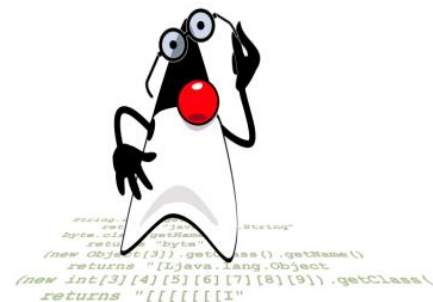
### ❖ Project Name: TextAreaAppend\_Source (Time: 20 min)

- 다중 라인 입력 TextArea의 문자열에 한 줄 입력 TextField의 문자열을 추가 한다.
  - append() method를 이용하여 동일한 Function을 하도록 구현하시오.

TextField 및 TextArea 예제

한 줄 입력

다중 라인 입력





# Practice 3 : Text Field & Text Area Control

## ❖ 입력(Input) Button Event Handler

```
MainFrame.java - Editor
MainFrame.java
Source Design History
1 public class MainFrame extends javax.swing.JFrame {
2
3     public MainFrame() {
4         initComponents();
5     }
6
7     @SuppressWarnings("unchecked")
8     Generated Code
84
86     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
87         String strCRLF = "\n"; //CR + LF(\n)
88         String strData = null; //String variable
89         strData = jTextField1.getText() + strCRLF; //TextField -> strData
90         jTextArea1.append(strData); //sreData -> TextArea
91
92     }
93
94     public static void main(String args[]) { ...8 lines }
102
```

Coding

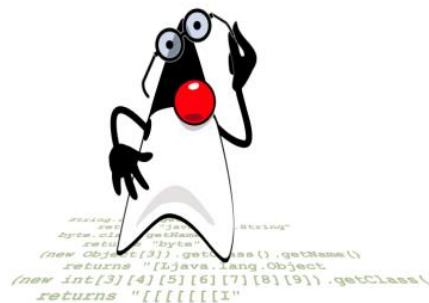




# Practice 4 : Key Event Handler

## ❖ Project Name: KeyEvent\_Source(Time: 20 min)

- 문자 입력에 하나의 문자 입력
  - 입력 문자 -> TextArea에 추가
- 초기화(Reset) Button Click
  - TextField 문자열 초기화
  - TextArea 문자열 초기화



Key Event 예제

문자 입력

입력 확인 

Inha  
Technical



# Practice 4 : Key Event Handler (1)

## Create Project

The screenshot shows the Apache NetBeans IDE interface. The 'File' menu is open, and 'New Project...' is highlighted. A yellow box labeled '1. Click' points to this menu item. The 'New Project' dialog is open, showing the 'Choose Project' tab. The 'Projects' list on the right contains 'Java Application', which is highlighted. A yellow box labeled '2. Click' points to this item. The 'Description' section at the bottom explains that this creates a new Java SE application. A yellow box labeled '3. Click' points to the 'Next >' button at the bottom right of the dialog. The 'Steps' section on the left lists '1. Choose Project' and '2. ...'. The 'Categories' list on the left includes 'Java with Ant', which is also highlighted.

1. Click

2. Click

3. Click





# Practice 4 : Key Event Handler (2)

## ■ Project Name and Location

❖ Project name: KeyEvent\_Source

New Java Application

**Steps**

1. Choose Project
2. **Name and Location**

**Name and Location**

Project Name: KeyEvent\_Source

Project Location: C:\Java\_Project Browse...

Project Folder: C:\Java\_Project\KeyEvent\_Source

☐ Use Dedicated Folder for Storing Libraries

Libraries Folder: Browse...

Different users and projects can share the same compilation libraries (see Help for details).

☐ Create Main Class keyevent\_source.KeyEvent\_Source

< Back Next > Finish Cancel Help

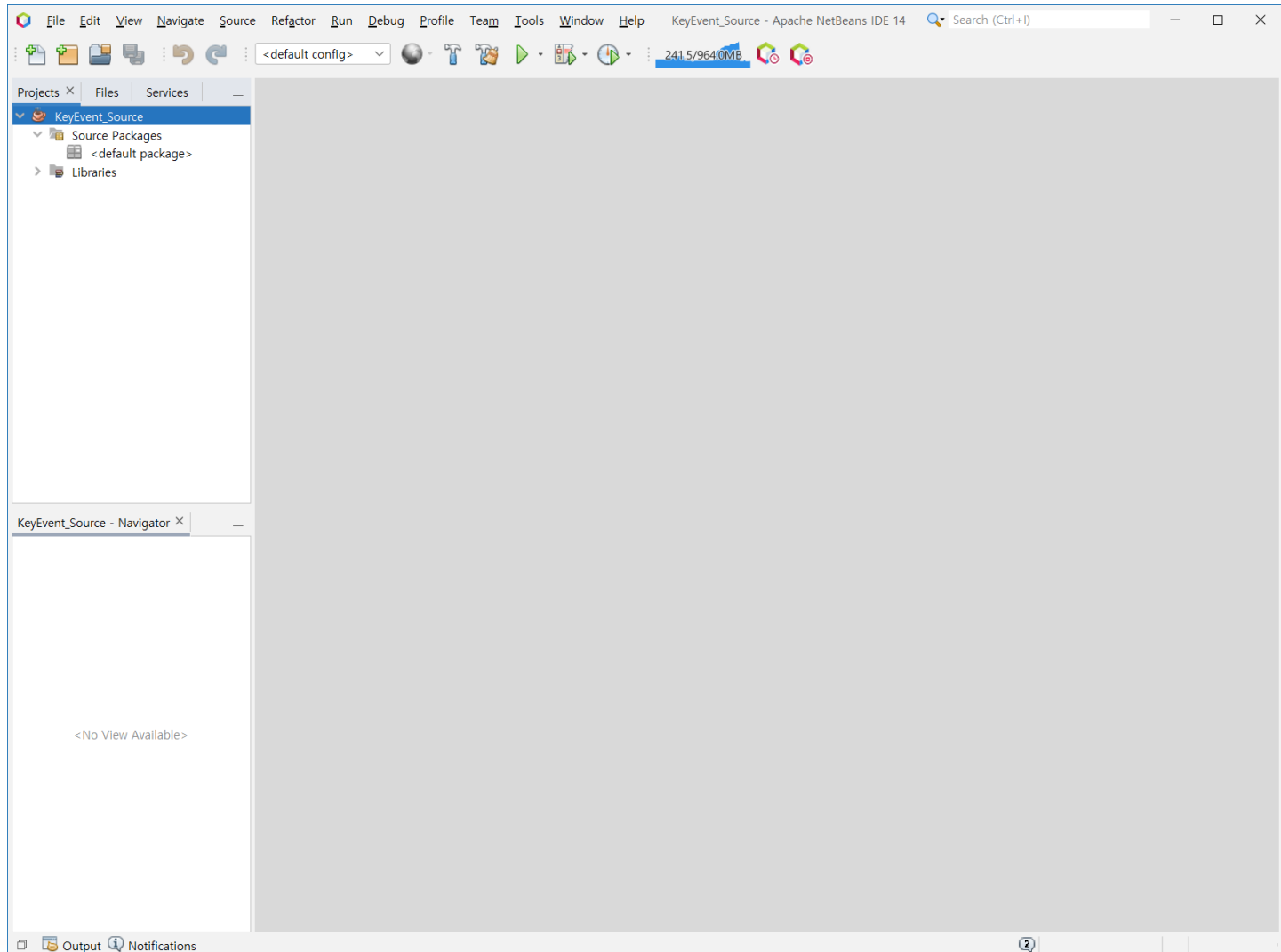






# Practice 4 : Key Event Handler (3)

## Create project success





# Practice 4 : Key Event Handler (4)

## ■ Create JFrame Form

7. Mouse right-button Click

8. Click

9. Click

Projects X

- KeyEvent\_Source
  - Source Packages
    - <default package>
  - Libraries

New

- Build
- Clean and Build
- Run
- Debug
- Profile
- Test
- Set Configuration
- Set as Main Project
- Open Required Projects
- Close
- Rename...
- Move...
- Copy...
- Delete
- Find...
- Versioning
- Local History
- Properties

Alt+F6

Delete

Ctrl+F

JFrame Form...

- Java Class...
- Java Package...
- Java Module...
- Java Project...
- JPA...
- Entity Class...
- Entity Classes from Database...
- Other...





# Practice 4 : Key Event Handler (5)

## ■ Setting Class Name

❖ Mainframe.java 생성

New JFrame Form

**Steps**

1. Choose File Type
2. Name and Location

**Name and Location**

Class Name: MainFrame

Project: KeyEvent\_Source

Location: Source Packages

Package:

Created File: C:\Java\_Project\KeyEvent\_Source\src\MainFrame.java

**Projects**

- KeyEvent\_Source
  - Source Packages
    - MainFrame.java
  - Libraries

10. Input "MainFrame"

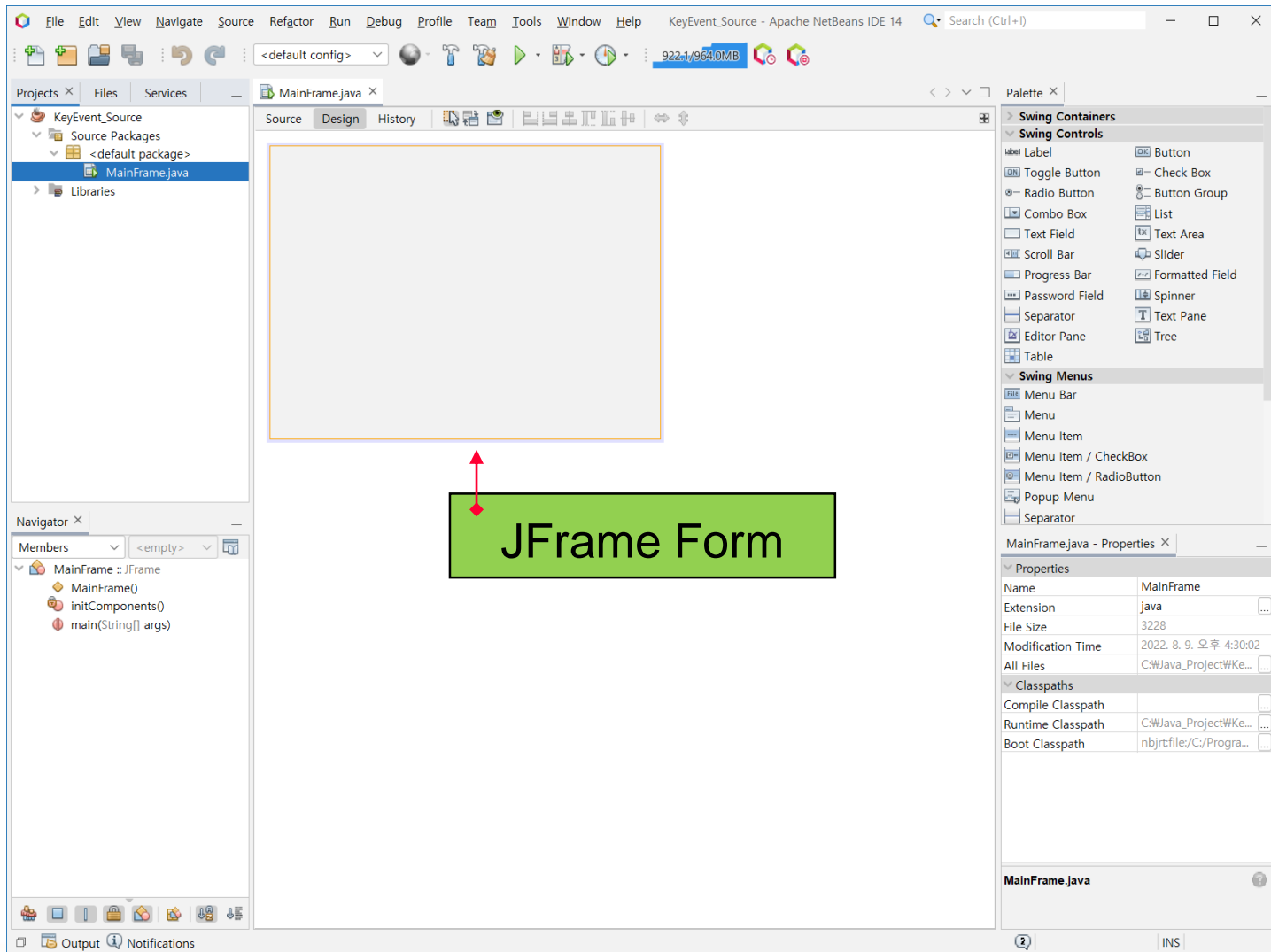
11. Click

< Back Next > Finish Cancel Help



# Practice 4 : Key Event Handler (6)

## Create JFrame form success





# Practice 4 : Key Event Handler (7)

## Control Layout & Property Setting

Key Event 예제

문자 입력

입력 확인

초기화(Reset)

Control	Properties Setting
jLabel1	• Text: Key Event 예제
jLabel2	• Text: 문자 입력
jLabel3	• Text: 입력 확인
jTextField1	• Text:
jTextArea1	• Text:
jButton1	• Text: 초기화(Reset)

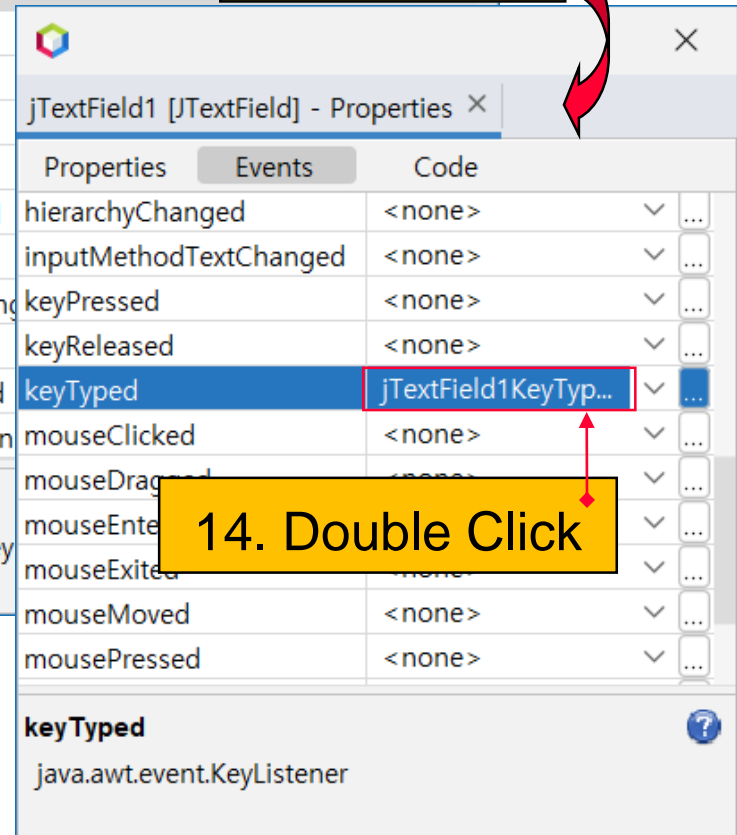
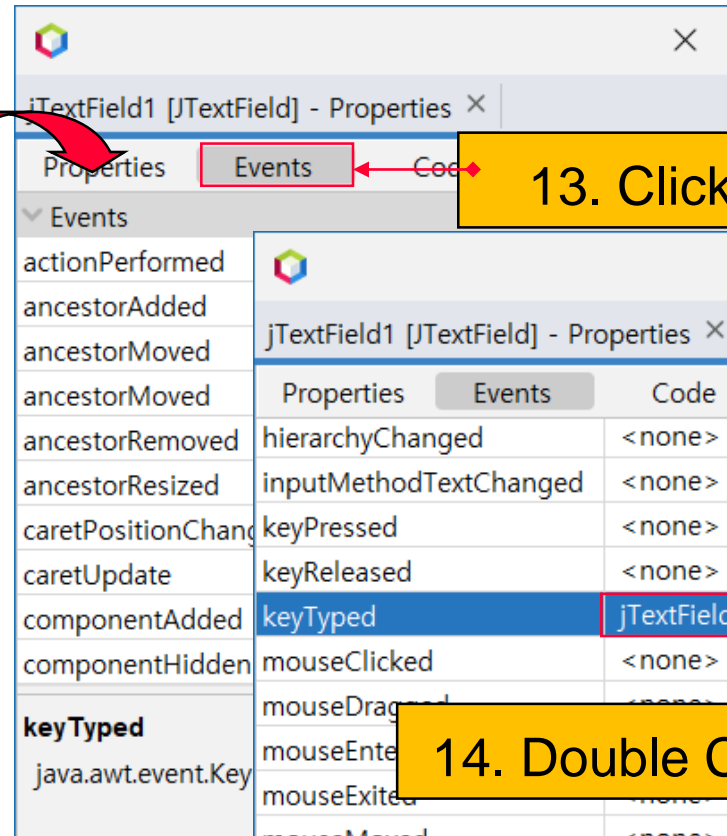
Control	Event
jTextField1	• ActionPerformed(Event evt) • KeyTyped(Event evt)
jButton1	• ActionPerformed(Event evt)





# Practice 4 : Key Event Handler (8)

## ■ jTextField1 Event 지정





# Practice 4 : Key Event Handler (9)

## ❖ KeyTyped Event Handler

```
MainFrame.java - Editor
MainFrame.java x
Source Design History
1
2 import java.awt.event.KeyEvent; //VK_BACK_SPACE, VK_ENTER Key
3
4 public class MainFrame extends javax.swing.JFrame {
5
6     public MainFrame() {
7         initComponents();
8     }
9
10    @SuppressWarnings("unchecked")
11    Generated Code
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38 private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {
39     if ( evt.getKeyChar() != KeyEvent.VK_BACK_SPACE){
40         //Add input Character
41         jTextField1.setText(jTextField1.getText() + evt.getKeyChar());
42     } else {
43         if ( evt.getKeyChar() == KeyEvent.VK_ENTER) //Add newline
44             jTextField1.setText(jTextField1.getText() + evt.getKeyChar() + "\n");
45     }
46 }
47
48 public static void main(String args[]) {...8 lines }
```

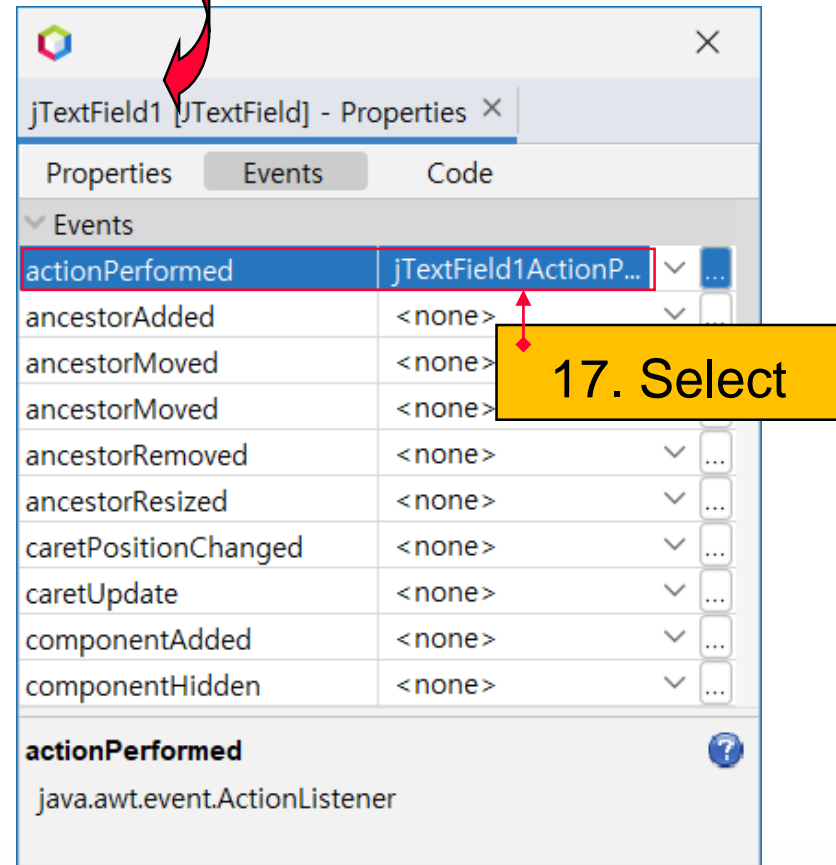
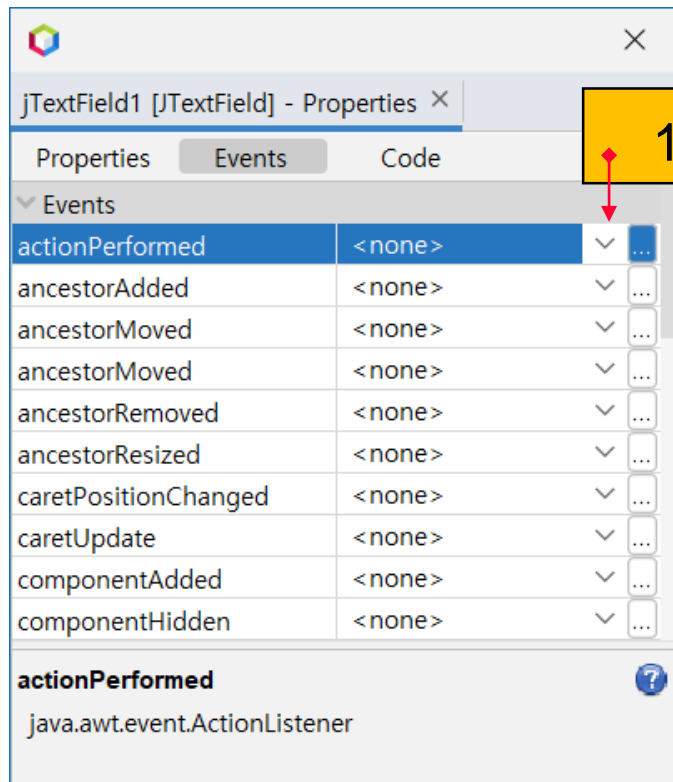
15. Coding





# Practice 4 : Key Event Handler (10)

## ■ jTextField1 ActionPerformed Event 지정

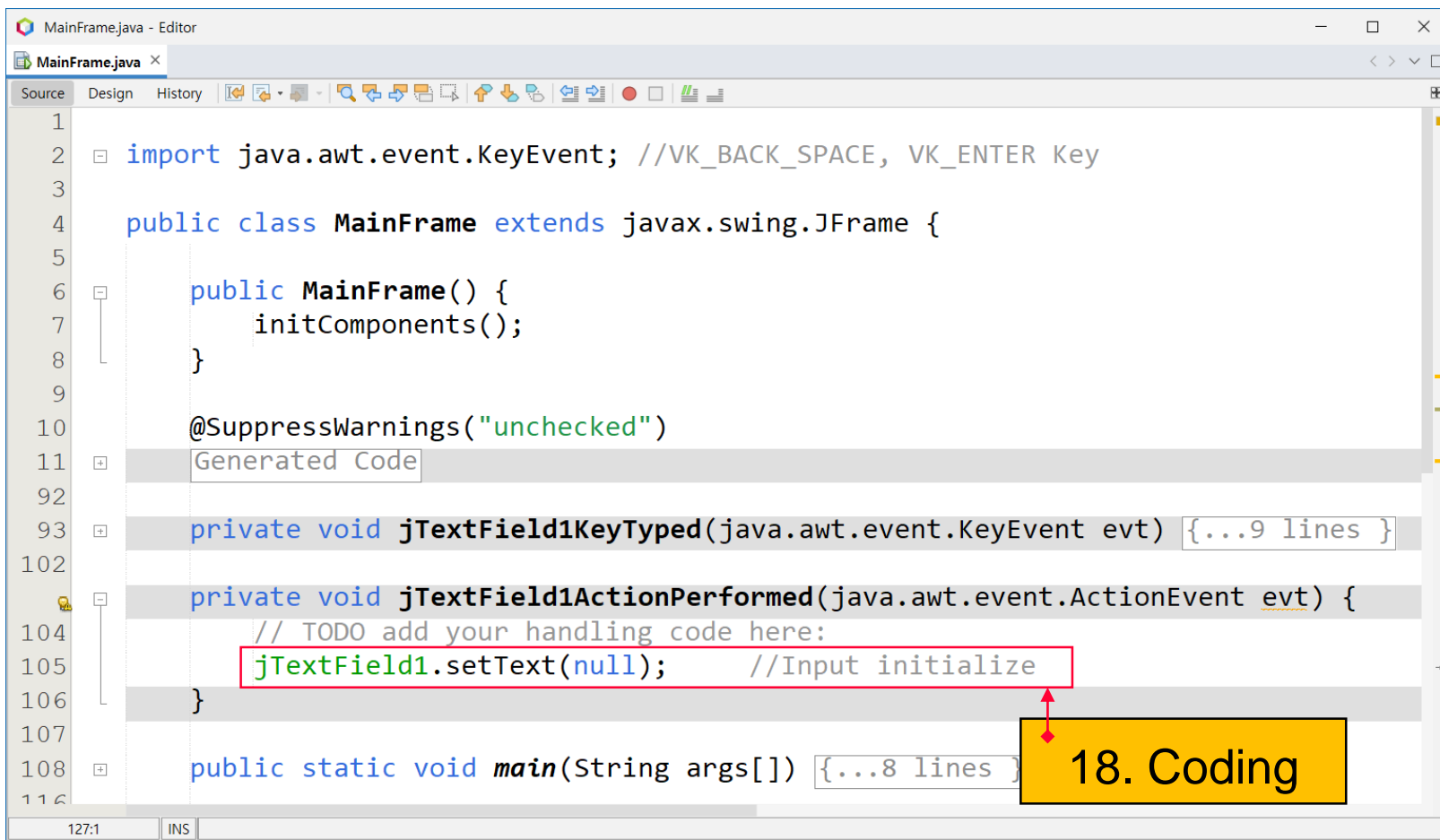






# Practice 4 : Key Event Handler (11)

## ❖ jTextField1 ActionPerformed Event Handler



```
1
2 import java.awt.event.KeyEvent; //VK_BACK_SPACE, VK_ENTER Key
3
4 public class MainFrame extends javax.swing.JFrame {
5
6     public MainFrame() {
7         initComponents();
8     }
9
10    @SuppressWarnings("unchecked")
11    Generated Code
12
13    private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {...9 lines }
14
15    private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
16        // TODO add your handling code here:
17        jTextField1.setText(null); //Input initialize
18    }
19
20    public static void main(String args[]) {...8 lines }
```





# Practice 4 : Key Event Handler (12)

## ■ jButton1 ActionPerformed Event 처리

Key Event 예제

문자 입력

입력 확인

초기화(Reset)

19. Double Click





# Practice 4 : Key Event Handler (13)

## ❖ JButton1 ActionPerformed Event Handler

```
MainFrame.java - Editor
MainFrame.java x
Source Design History
10 @SuppressWarnings("unchecked")
11 Generated Code
97
98 private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {
99     if ( evt.getKeyChar() != KeyEvent.VK_BACK_SPACE){
100         //Add input Character
101         jTextField1.setText(jTextField1.getText() + evt.getKeyChar());
102     } else {
103         if ( evt.getKeyChar() == KeyEvent.VK_ENTER) //Add newline
104             jTextField1.setText(jTextField1.getText() + evt.getKeyChar() + "\n");
105     }
106 }
107
108 private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
109     // TODO add your handling code here:
110     jTextField1.setText(null); //Input initialize
111 }
112
113 private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
114     // TODO add your handling code here:
115     jTextField1.setText(null); //jTextField1 initialize
116     jTextField2.setText(null); //jTextField2 initialize
117 }
118
```

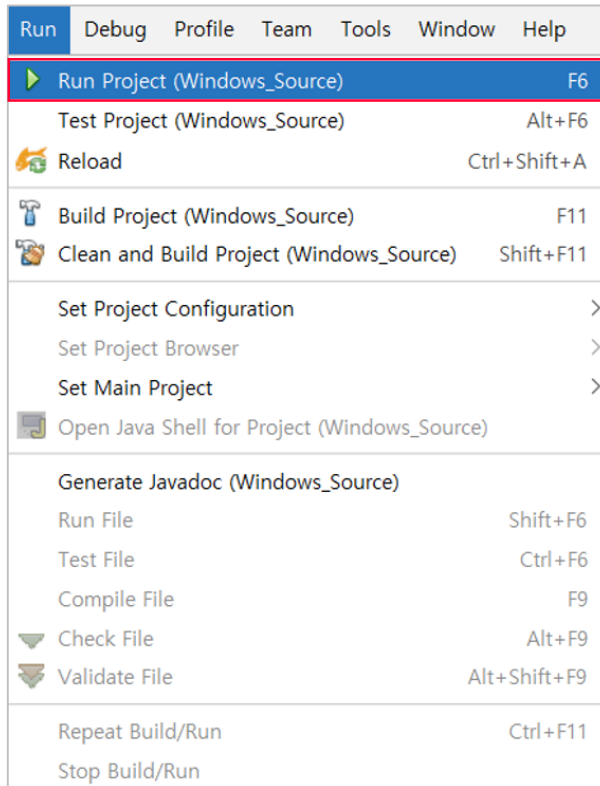
20. Coding



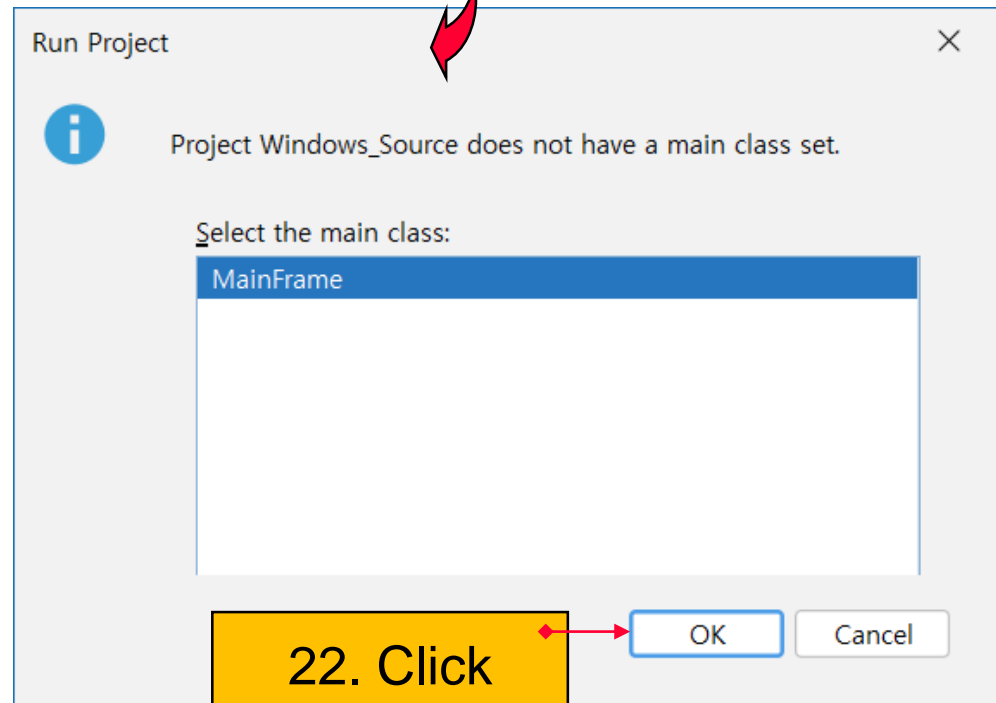


# Practice 4 : Key Event Handler (14)

## Run



21. Click



22. Click





# Practice 4 : Key Event Handler (15)

## ■ Run

### ❖ 문자 입력

- ◆ Inha
- ◆ Technical
- ◆ College

### ❖ 초기화(Reset) Button Click

- ◆ TextField 초기화
- ◆ Text Are 초기화

Key Event 예제

문자 입력 College

입력 확인 Inha  
Technical  
College

초기화(Reset)

Key Event 예제

문자 입력

입력 확인

초기화(Reset)

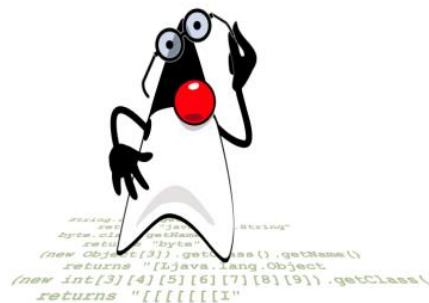




# Practice 5 : Key Event Handler

## ❖ Project Name: KeyEvnet2\_Source(Time: 20 min)

- 문자 입력에 문자열 입력 후에 [Enter] Key 누름
  - 입력 문자열 -> TextArea에 추가
- 초기화(Reset) Button Click
  - TextField 문자열 초기화
  - TextArea 문자열 초기화



Key Event 예제

문자 입력 College

입력 확인 Inha  
Technical

초기화(Reset)



# Practice 5 : Key Event Handler

## ❖ KeyTyped Event Handler

MainFrame.java - Editor

MainFrame.java x

Source Design History

Generated Code

Coding

```
10 @SuppressWarnings("unchecked")
11
97
98 private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {
99
100     if ( evt.getKeyChar() == KeyEvent.VK_ENTER){ //Add newline
101         1
102     }
103 }
104
105
106 private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
107     // TODO add your handling code here:
108     //jTextField1.setText(null); //Input initialize
109 }
110
111 private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
112     // TODO add your handling code here:
113     jTextField1.setText(null); //jTextField1 initialize
114     jTextArea1.setText(null); //jTextArea1 initialize
115 }
116
```

127:41/1:8 INS

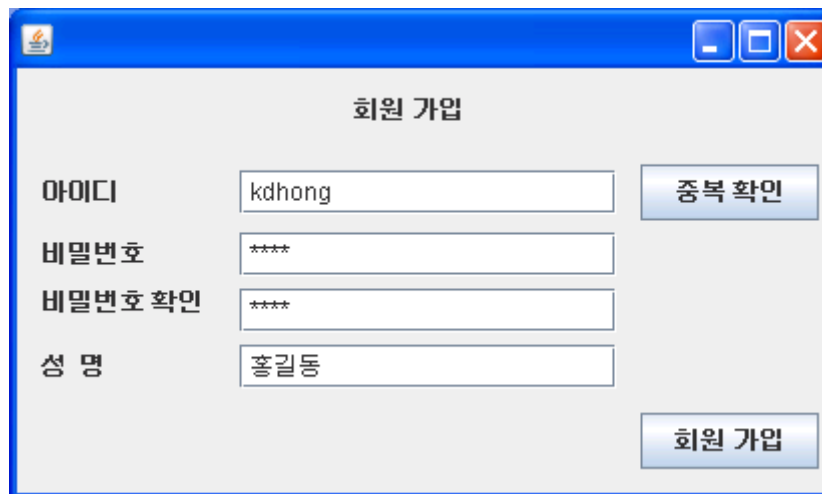




# Homework # 1

## ❖ 회원 가입 모듈 구현

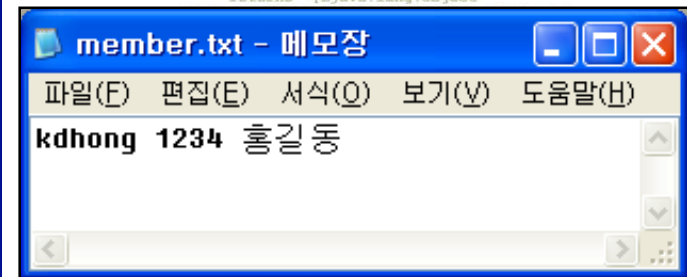
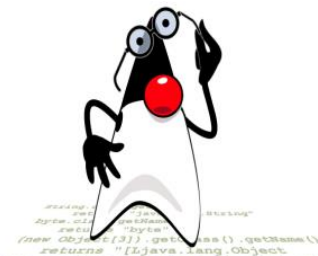
- Project 명: Member\_ID
- [중복 확인] Button Click
  - member.txt 파일에서 회원정보를 read하여 중복되는 "아이디"가 존재하는지를 검색하여 결과를 출력한다.
- [회원 가입] Button Click
  - 비밀번호가 일치하면 아이디, 비밀번호, 이름을 member.txt 파일에 저장한다.



회원 가입	
아이디	kdhong
비밀번호	****
비밀번호 확인	****
성명	홍길동

중복 확인

회원 가입





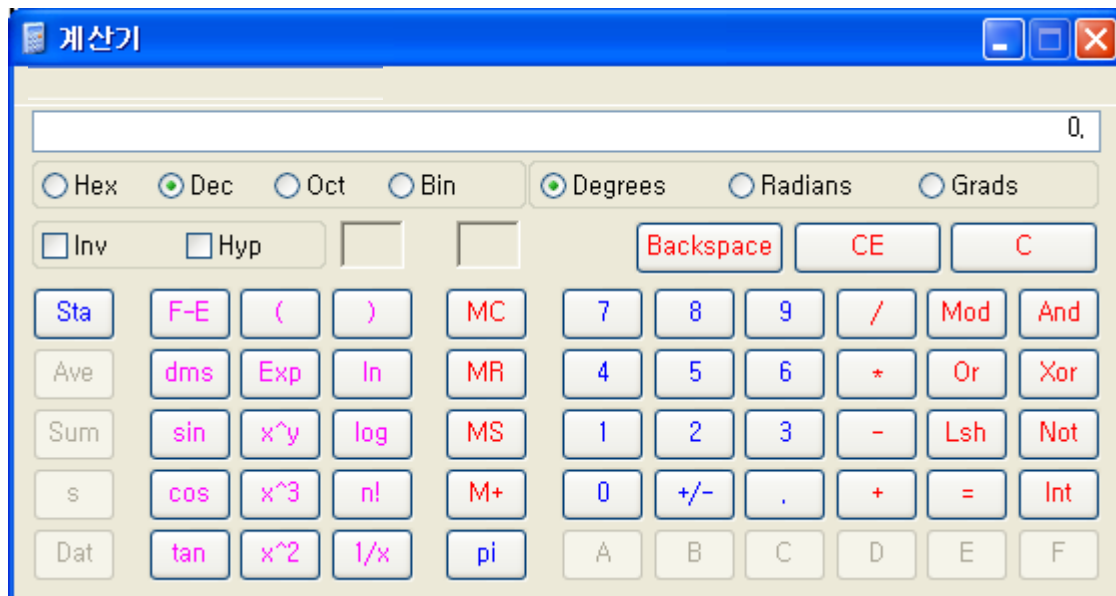
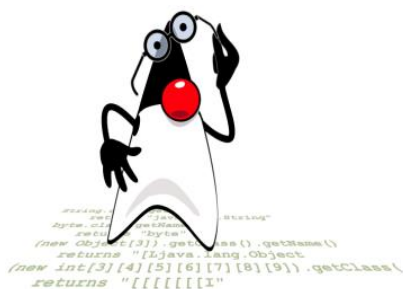


# Homework # 2

## ❖ 계산기 구현

■ Project 명: Calculator\_Source

- 일반용
- 공학용





# 학습 요약

- ❖ Label Control
- ❖ Button Control
- ❖ Text Field Control
- ❖ Text Area Control

