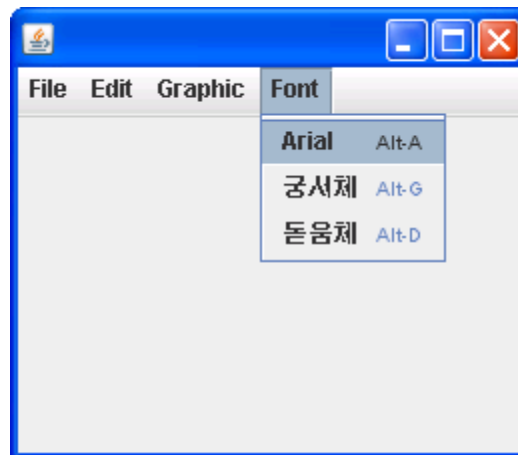




JAVA



Menu





학습 목표

■ 이 강의를 마치면 학생들은

- ❖ Menu에 대하여 설명할 수 있다.
- ❖ Menu Event Handler에 대하여 설명할 수 있다.
- ❖ Graphic 기능에 대하여 설명할 수 있다.
- ❖ PopUp Menu에 대하여 설명할 수 있다.
- ❖ Font 에 대하여 설명할 수 있다.





Menu (1)

■ Menu

❖ 기능

- ◆ 폼에 표시할 메뉴를 나타내는 기능

❖ 구성

구성 요소	클래스
메뉴바	Java.awt.MenuBar
메뉴	Java.awt.Menu
메뉴 아이템	Java.awt.MenuItem

❖ MenuBar 클래스 객체 생성

```
MenuBar mnuBar = new MenuBar();
```





Menu (2)

❖ Menu 클래스 객체 생성

```
Menu m = new Menu("메뉴 명");
```

❖ Menu ← MenuItem 추가

```
MenuItem item = MenuItem("Menu Item 명" );  
m.add(item);
```

❖ ManuBar ← Menu 추가

```
mnuBar.addMenu(m);
```

❖ Frame ← ManuBar 추가

```
Frame fm = new Frame();  
fm.add(mnBar);
```

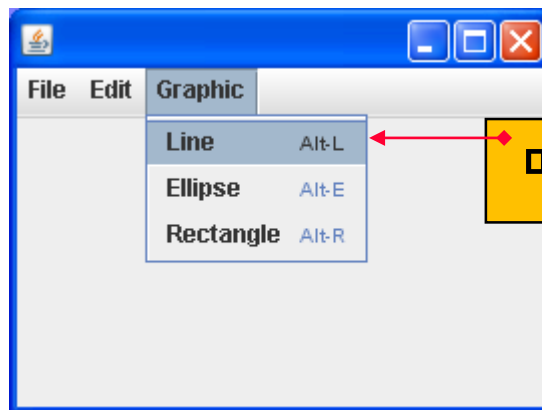




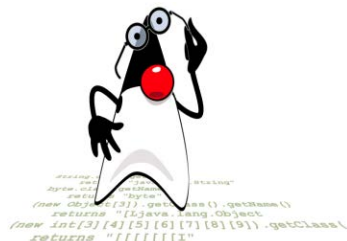
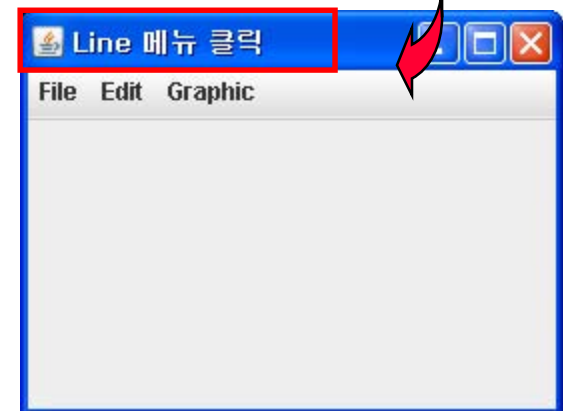
실습 1 : Menu

❖ Project Name: Menu_Source(실습시간 : 30분)

- [Graphic] 메뉴의 하위 메뉴 클릭 / 단축 키 입력
 - Line : 제목표시줄에 “Line 메뉴 클릭” 메시지 출력
 - Ellipse : 제목표시줄에 “Ellipse 메뉴 클릭” 메시지 출력
 - Rectangle : 제목표시줄에 “Rectangle 메뉴 클릭” 메시지 출력



메뉴 클릭 or 단축키 입력



```
package menu;
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;

public class MenuSource {
    public static void main(String[] args) {
        JFrame f = new JFrame("Menu Source");
        f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        f.setSize(400, 300);
        f.setVisible(true);
    }
}
```



실습 1 : Menu (1)

Application 생성

1. 클릭

NetBeans IDE 6.0.1

File Edit View Navigate Source Refactor

New Project... Ctrl+Shift+N

New File... Ctrl+N

Open Project... Ctrl+O

Open Recent Project

Close Project

Open File... Ctrl+F

Open Recent File

Project Group

Set Main Project

Project Properties

Save Ctrl+S

Save As... Ctrl+Shift+S

Save All Ctrl+Shift+A

Page Setup... Ctrl+P

Print... Ctrl+P

Print to HTML... Ctrl+Shift+P

Exit Ctrl+N

2. 클릭

New Project

Steps

1. Choose Project
2. ...

Choose Project

Categories:

- Java
- NetBeans Modules
- Samples

Projects:

- Java Application
- Java Desktop Application
- Java Class Library
- Java Project with Existing Sources
- Java Project with Existing Ant Script

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.

3. 클릭

Back Next > Finish Cancel Help





❖ Project name: Menu_Source



5. 클릭

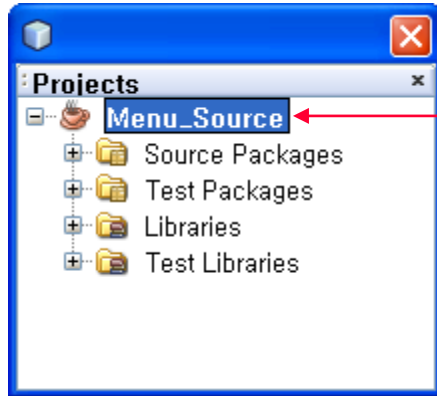
6. 클릭



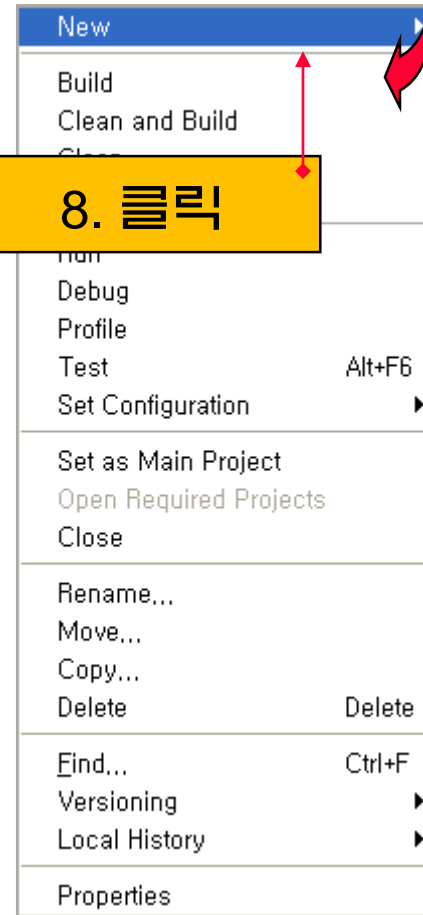


실습 1 : Menu (3)

JFrame Form 생성

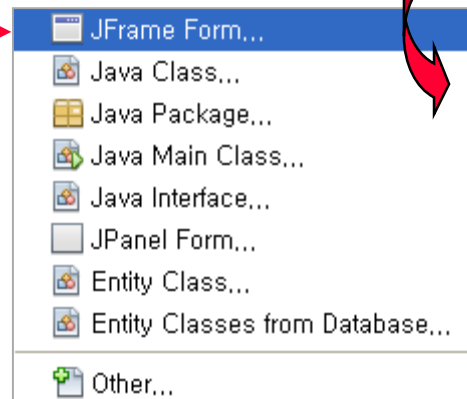


7. 마우스 오른쪽 버튼 클릭



8. 클릭

9. 클릭





실습 1 : Menu (4)

JFrame Form Name 지정

❖ MainFrame.java 생성

New JFrame Form

Steps

1. Choose File Type
2. **Name and Location**

Name and Location

Class Name: MainFrame

Project: Menu_Source

Location: Source Packages

Package:

Created File: CTURE\Java_프로그래밍\Source\Menu_Source\src\MainFrame.java

10. MainFrame 입력

11. 클릭

Warning: It is highly recommended that you do NOT place Java classes in the def...

< Back Next > Finish Cancel Help

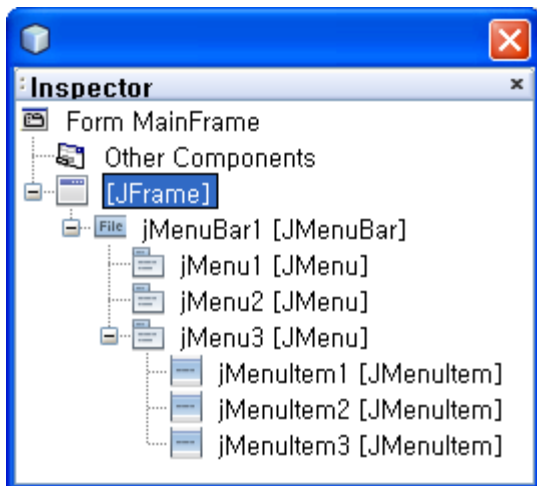
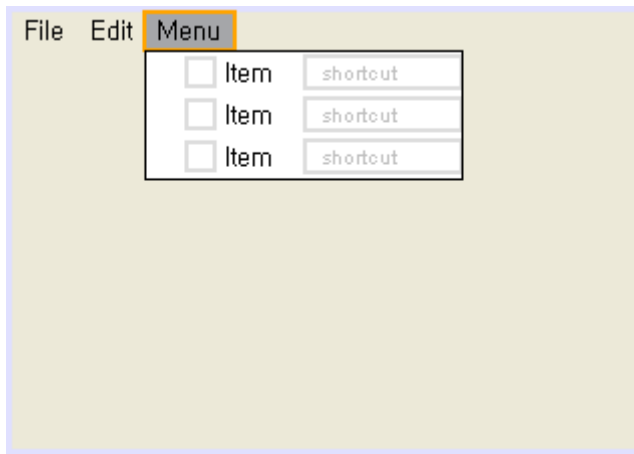




실습 1 : Menu (5)

■ 컨트롤 배치 및 속성 지정

❖ MainFrame



컨트롤	속성 지정
jMenuBar1	<ul style="list-style-type: none">• Variable Name : jMenuBar1
jMenu1	<ul style="list-style-type: none">• Variable Name : mnuFile• Text : File
jMenu2	<ul style="list-style-type: none">• Variable Name : mnuEdit• Text : Edit
jMenu3	<ul style="list-style-type: none">• Variable Name : mnuGraphic• Text : Graphic
jMenuItem1	<ul style="list-style-type: none">• Variable Name : mnuGraphic_Line• Text : Line
jMenuItem2	<ul style="list-style-type: none">• Variable Name : mnuGraphic_Ellipse• Text : Ellipse
jMenuItem3	<ul style="list-style-type: none">• Variable Name : mnuGraphic_Rectangle• Text : Rectangle

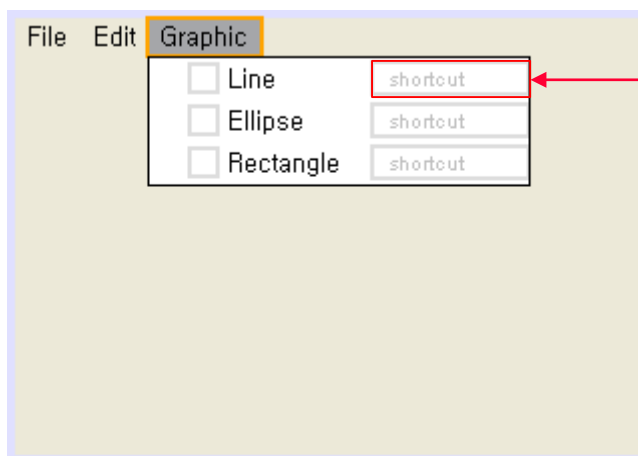




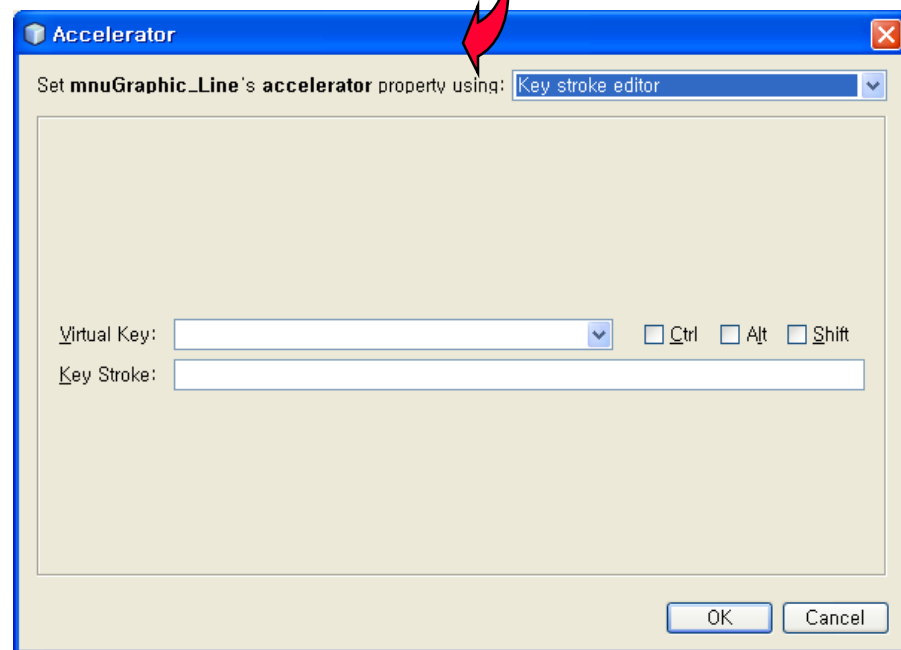
실습 1 : Menu (6)

❖ 단축키(Shortcut) 지정

◆ Line : Alt + L

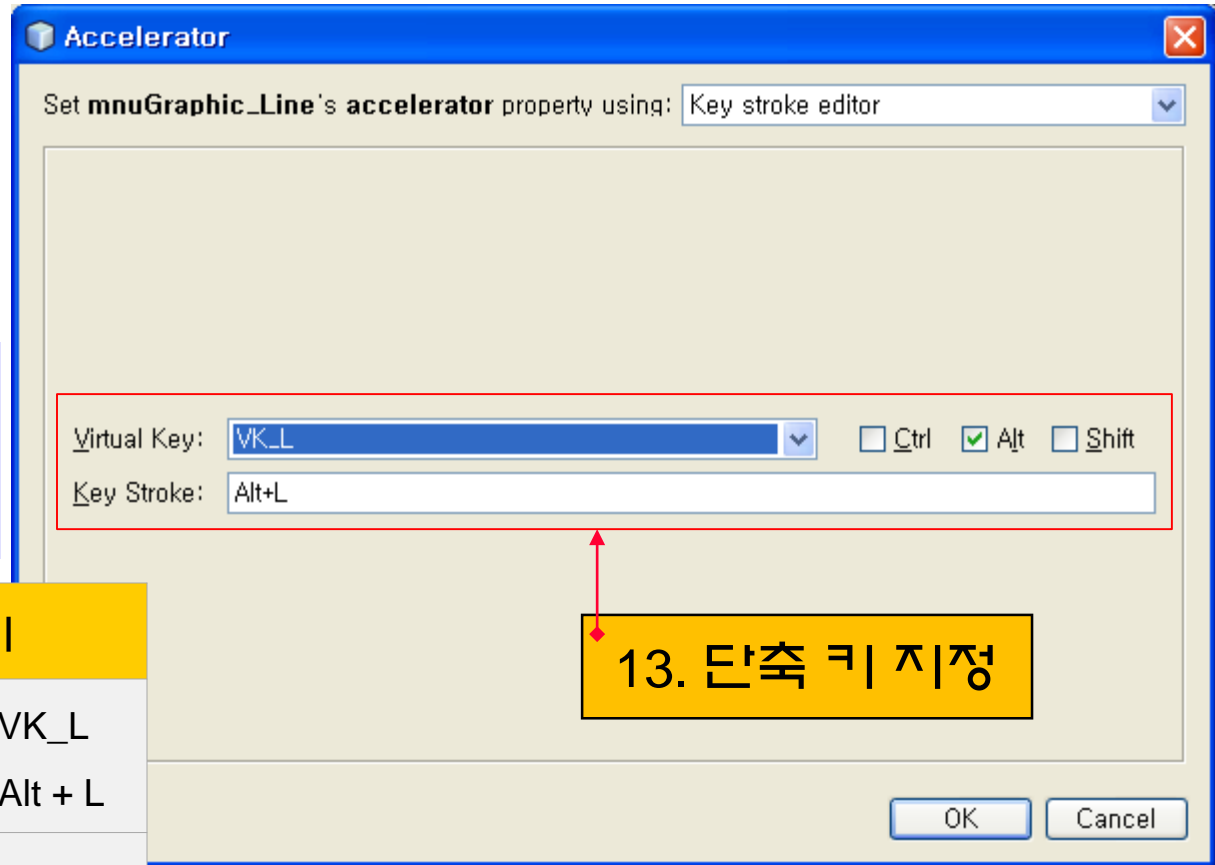
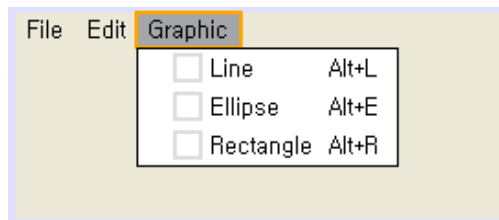


12. 더블 클릭

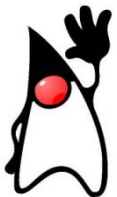




실습 1 : Menu (7)



메뉴	단축 키
Line	<ul style="list-style-type: none">• Virtual Key : VK_L• Key Stroke : Alt + L
Ellipse	<ul style="list-style-type: none">• Virtual Key : VK_E• Key Stroke : Alt + E
Rectangle	<ul style="list-style-type: none">• Virtual Key : VK_R• Key Stroke : Alt + R





실습 1 : Menu (8)

❖ Menu 관련 컨트롤 속성 지정 Code

```
MainFrame.java * - Editor
MainFrame.java *
Source Design
37
38 mnuFile.setText("File");
39 jMenuBar1.add(mnuFile);
40
41 mnuEdit.setText("Edit");
42 jMenuBar1.add(mnuEdit);
43
44 mnuGraphic.setText("Graphic");
45
46 mnuGraphic_Line.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.ev
47 mnuGraphic_Line.setText("Line");
48 mnuGraphic.add(mnuGraphic_Line);
49
50 mnuGraphic_Ellipse.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt
51 mnuGraphic_Ellipse.setText("Ellipse");
52 mnuGraphic.add(mnuGraphic_Ellipse);
53
54 mnuGraphic_Rectangle.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.
55 mnuGraphic_Rectangle.setText("Rectangle");
56 mnuGraphic.add(mnuGraphic_Rectangle);
57
58 jMenuBar1.add(mnuGraphic);
59
60 setJMenuBar(jMenuBar1);
```



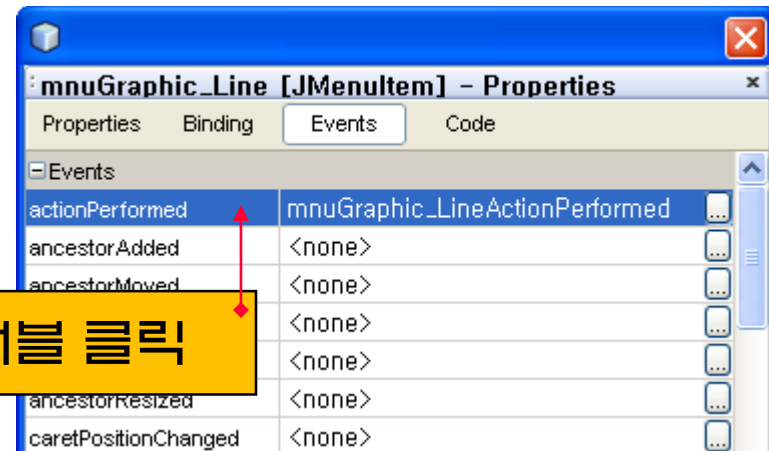


실습 1 : Menu (9)

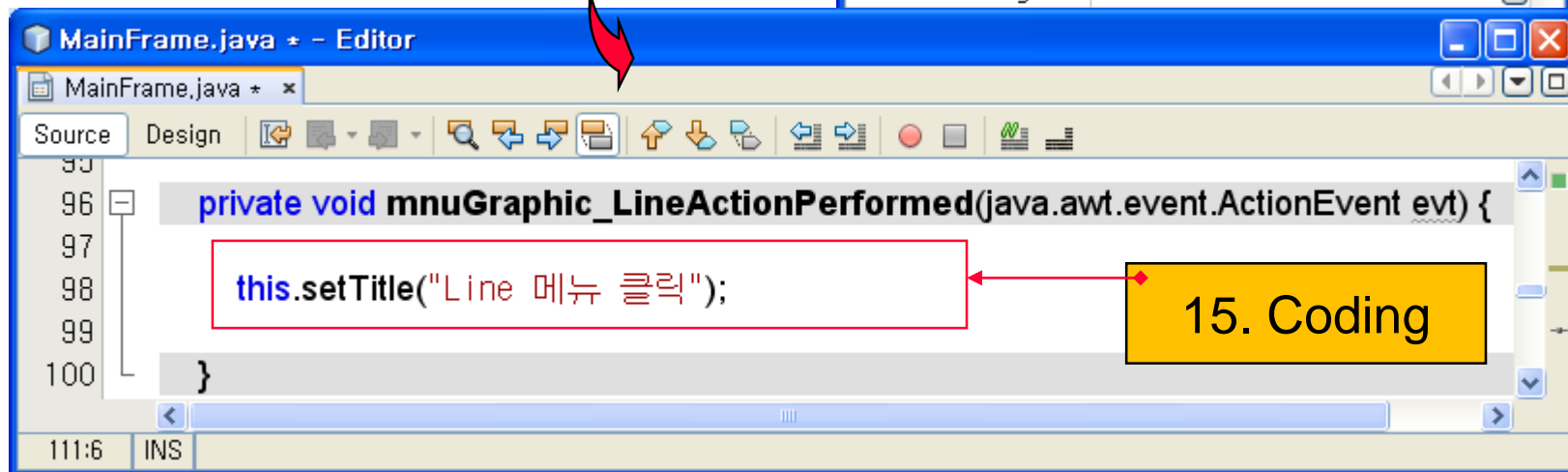
❖ [Line] 메뉴 Event Handler

◆ Event

- ActionPerformed



14. 더블 클릭



15. Coding



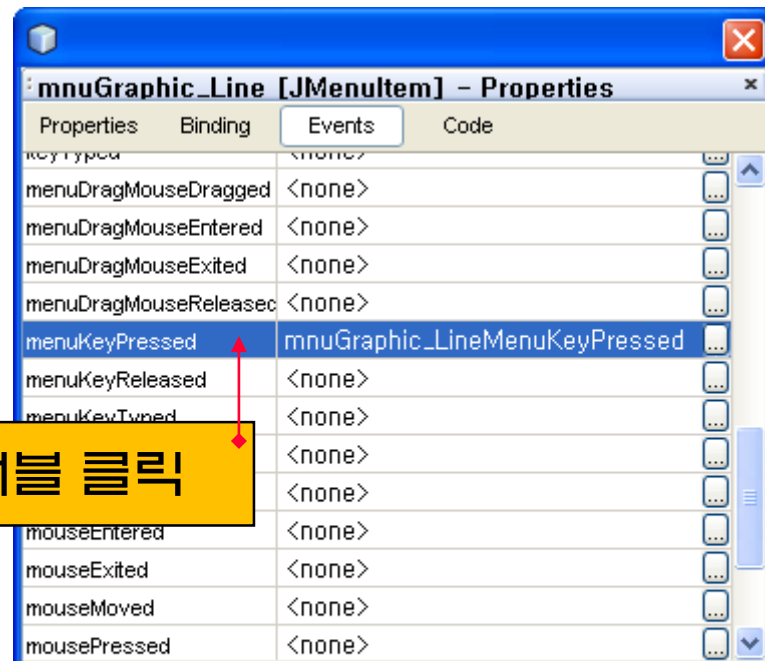


실습 1 : Menu (10)

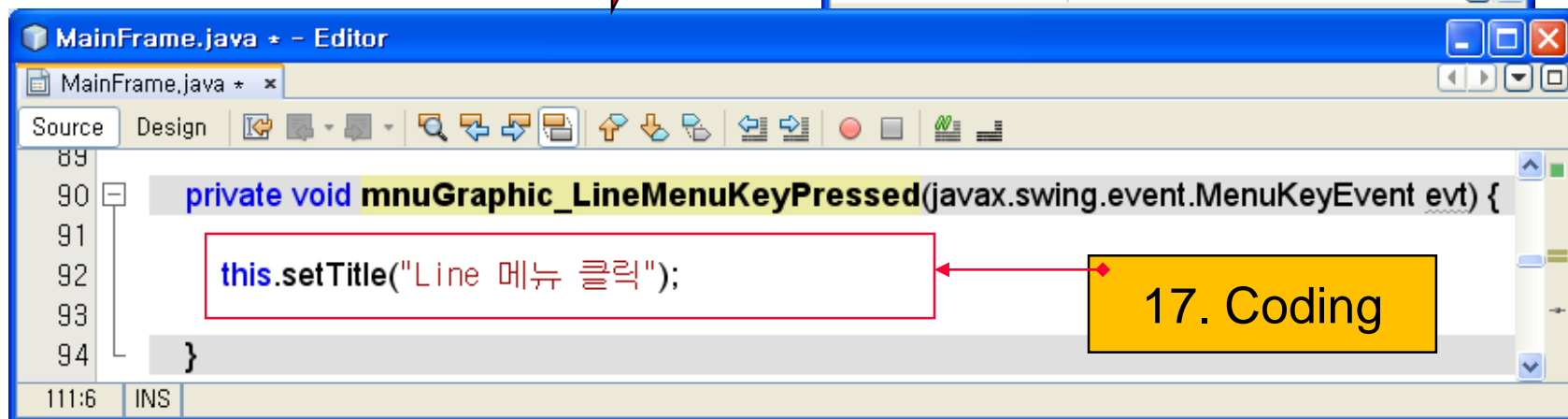
❖ [Line] 메뉴 Event Handler

◆ Event

- menuKeyPressed



16. 더블 클릭



17. Coding





실습 1 : Menu (11)

❖ [Eclipse] 메뉴 Event Handler

◆ Event

- ActionPerformed
- menuKeyPressed

```
MainFrame.java * - Editor
MainFrame.java * x
Source Design
129
130 private void mnuGraphic_EllipseActionPerformed(java.awt.event.ActionEvent evt) {
131     this.setTitle("Ellipse 메뉴 클릭");
132 }
133
134
135
136 private void mnuGraphic_EllipseMenuKeyPressed(javax.swing.event.MenuKeyEvent ev
137     this.setTitle("Ellipse 메뉴 클릭");
138 }
139
140
155:46 INS
```

18. Coding





실습 1 : Menu (12)

❖ [Rectangle] 메뉴 Event Handler

◆ Event

- ActionPerformed
- menuKeyPressed

```
MainFrame.java - Editor
MainFrame.java x
Source Design
142 private void mnuGraphic_RectangleActionPerformed(java.awt.event.ActionEvent evt) {
143     this.setTitle("Rectangle 메뉴 클릭");
144 }
145
146
147
148 private void mnuGraphic_RectangleMenuKeyPressed(javax.swing.event.MenuKeyEvent evt) {
149     this.setTitle("Rectangle 메뉴 클릭");
150 }
151
152 }
```

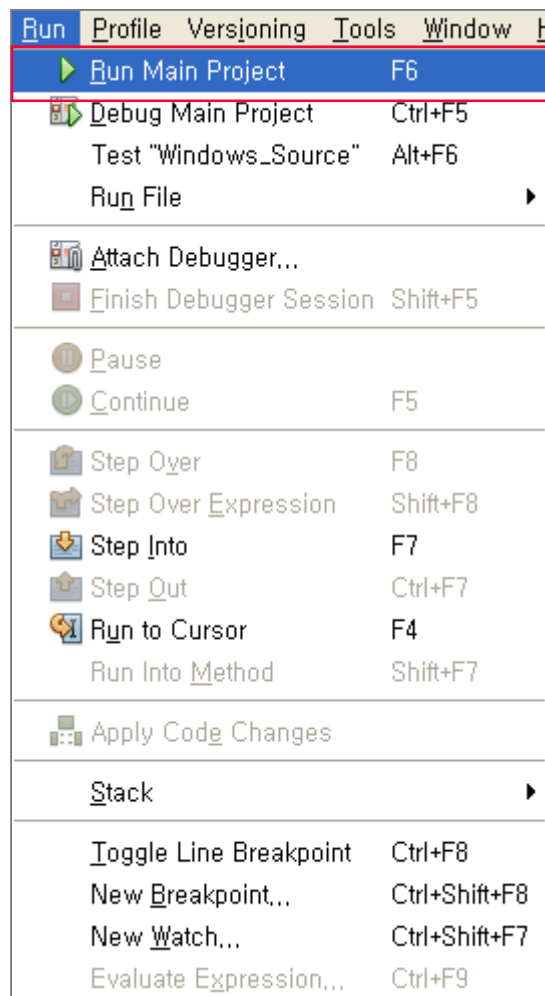
19. Coding



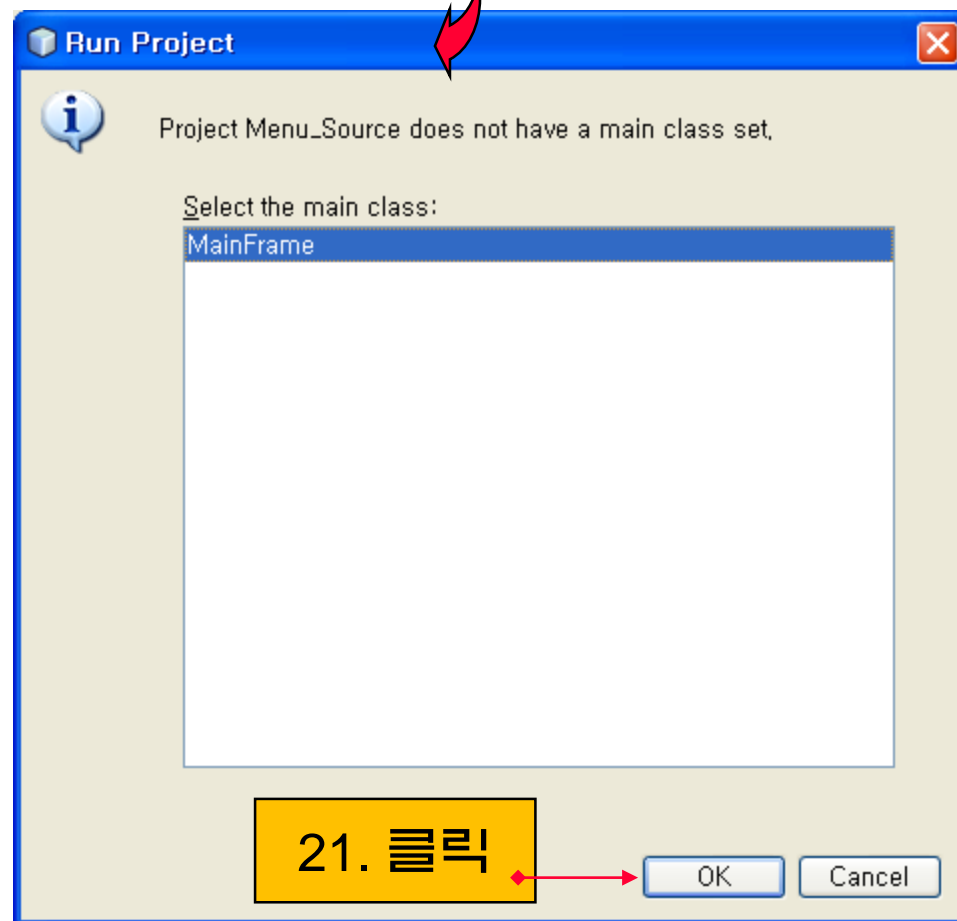


실습 1 : Menu (13)

실행



20. 클릭



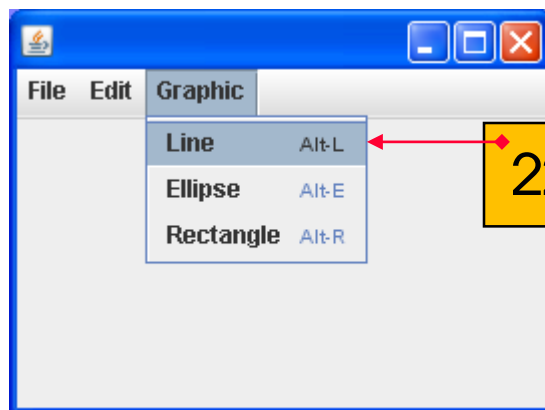
21. 클릭



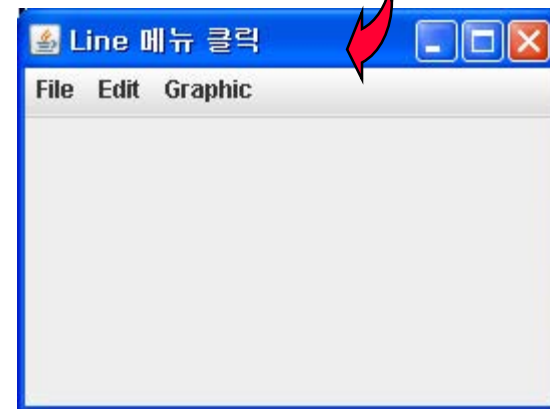
실습 1 : Menu (14)

■ 실행 결과

❖ [Line] 메뉴 클릭



22. 클릭 / Alt + L 키 입력

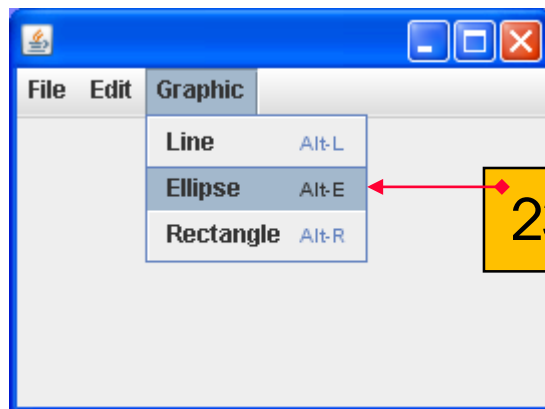




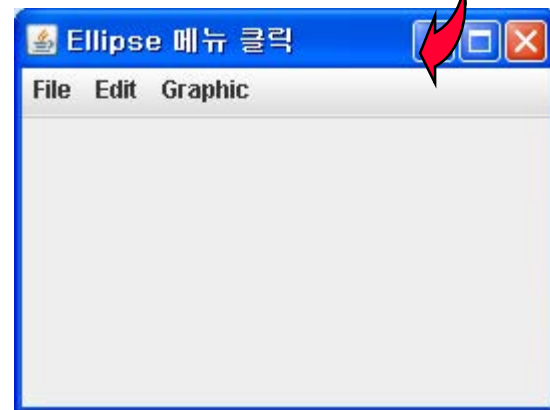
실습 1 : Menu (15)

■ 실행 결과

❖ [Ellipse] 메뉴 클릭



23. 클릭 / Alt + E 키 입력

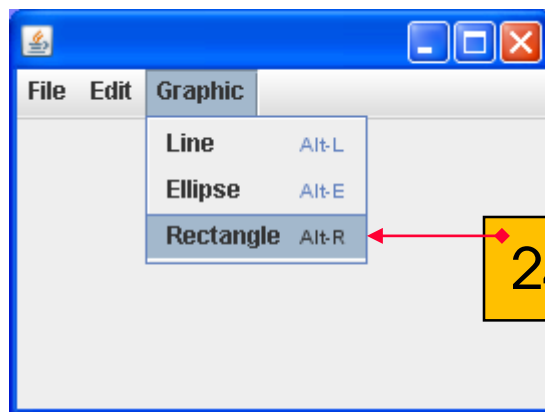




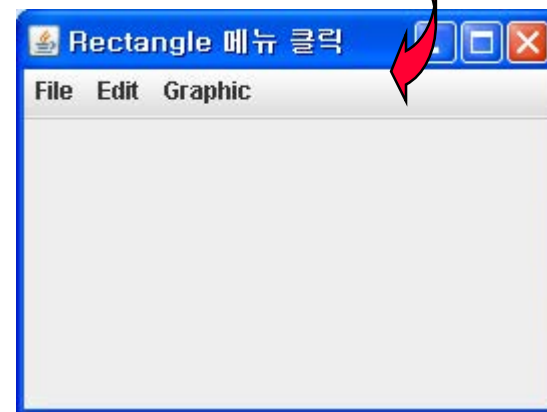
실습 1 : Menu (16)

■ 실행 결과

❖ [Rectangle] 메뉴 클릭



24. 클릭 / Alt + L 키 입력



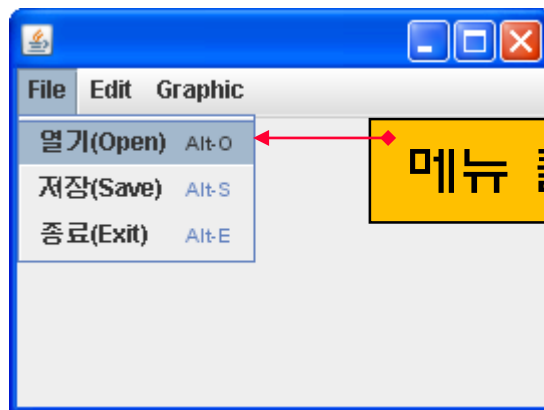


실습 2 : Menu

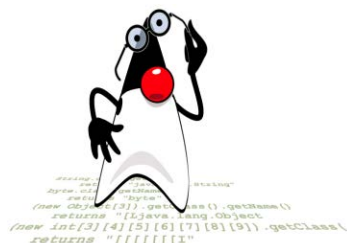
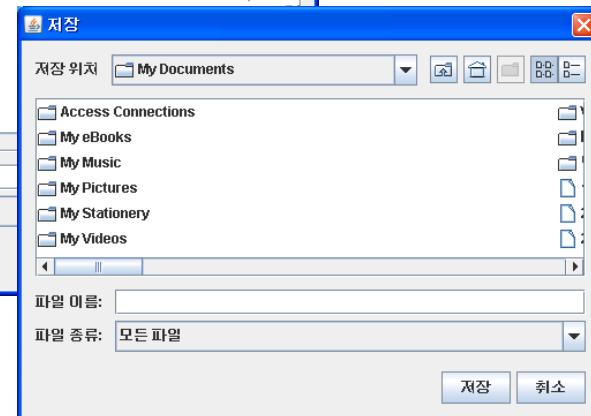
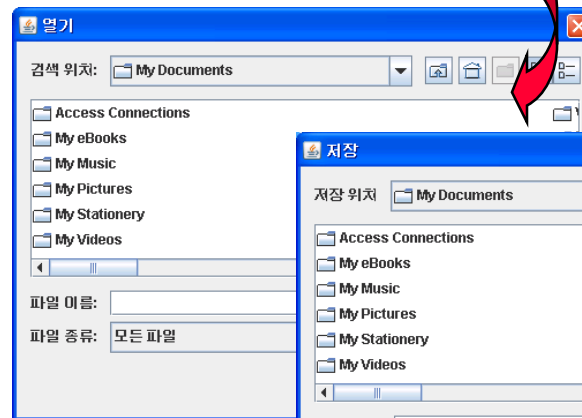
❖ Project Name: Menu_Source(실습시간 : 60분)

■ [File] 메뉴의 하위 메뉴 클릭 / 단축 키 입력

- 열기(Open) : FileDialog 실행
- 저장(Save) : FileDialog 실행
- 종료(Exit) : 프로그램 종료



메뉴 클릭 or 단축키 입력





Color Class (1)

■ Color 클래스

❖ 구성

```
Color(int r, int g, int b)
```

❖ Method

메서드	설명
<code>Color</code> getColor()	현재 설정된 Color 반환
<code>void</code> setColor(<code>Color</code> c)	새로운 Color 설정
<code>Color</code> getBackground()	컴포넌트의 배경색 반환
<code>Color</code> getForeground()	컴포넌트의 전경색 반환
<code>void</code> setBackground(<code>Color</code> c)	컴포넌트의 배경색 지정
<code>void</code> setForeground(<code>Color</code> c)	컴포넌트의 전경색 지정





Color Class (2)

❖ 색상값

상수값	색상	상수값	색상
Color.black, Color.BLACK	검정색	Color.magenta, Color.MAGENTA	진홍색
Color.blue, Color.BLUE	파란색	Color.orange, Color.ORANGE	주황색
Color.cyan, Color.CYAN	하늘색	Color.pink, Color.PINK	분홍색
Color.darkGray, Color.DARK_GRAY	짙은 회색	Color.red, Color.RED	빨간색
Color.gray, Color.GRAY	회색	Color.white, Color.WHITE	하얀색
Color.green, Color.GREEN	녹색	Color.yellow, Color.YELLOW	노란색





Graphic Class

■ Graphics 클래스

❖ 기능

◆ 도형(선, 타원, 사각형, 다각형) 그리기 구현 기능

❖ Method

메서드	설명
draw3DRect(), fill3DRect()	입체 사각형 그리기
drawLine()	선 그리기
drawRect(), fillRect()	사각형 그리기, 채운 사각형 그리기
drawOval(), fillOval()	타원 그리기, 채운 타원 그리기
drawArc (), fillArc()	부채꼴 그리기, 채운 부채꼴 그리기
drawPolygon(), fillPolygon()	다각형 그리기, 채운 다각형 그리기
drawPolyline()	연결선 그리기
drawString()	문자쓰기
drawRoundRect(), fillRoundRect()	둥근 사각형 그리기, 둥근 사각형 채우기
drawImage()	이미지 그리기



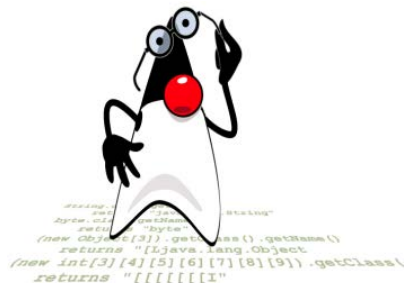
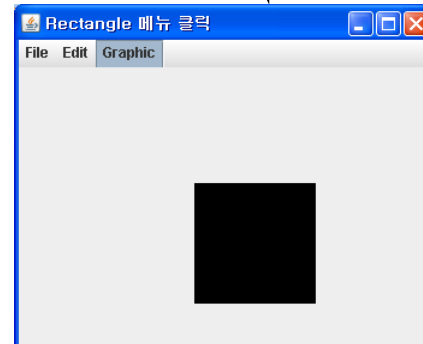
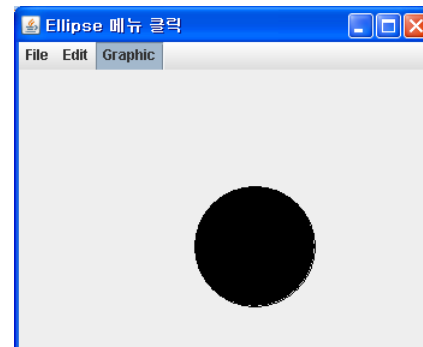
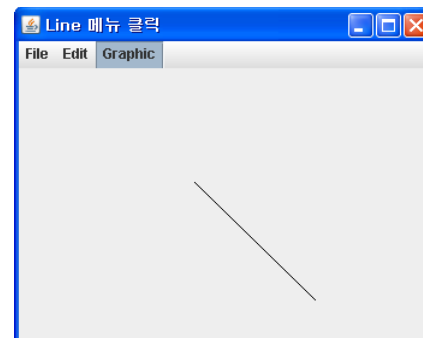
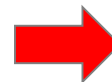
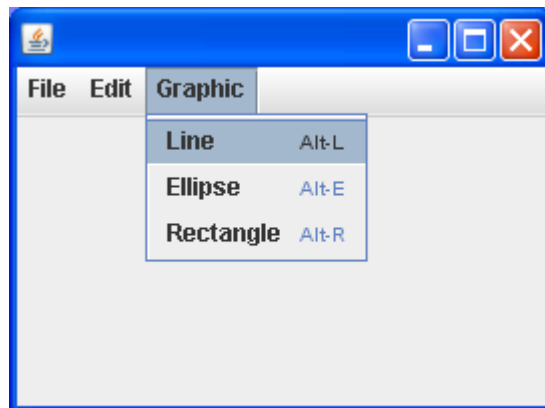


실습 3 : Menu

❖ Project Name: Menu_Source(실습시간 : 30분)

■ [Graphic] 메뉴의 하위 메뉴 클릭 / 단축 키 입력

- Line : Line 그리기
- Ellipse : Ellipse 그리기
- Rectangle : Rectangle 그리기





실습 3 : Menu (1)

❖ 멤버 변수 지정 Code



실습 3 : Menu (2)

❖ Paint 메서드

```
MainFrame.java - Editor
MainFrame.java
Source Design
public void paint(Graphics g)
{
    //g.clearRect(0, 53, this.getWidth(), this.getHeight());
    super.paintComponents(g);
    switch ( iMenu_idx){
        case 31:
            g.drawLine(ix, iy, 250, 250);           // Line 그리기
            break;
        case 32:
            g.drawOval(ix, iy, width, height);       // 타원 그리기
            g.fillOval(ix, iy, width, height);       // 타원 채우기
            break;
        case 33:
            g.drawRect(ix, iy, width, height);       // 사각형 그리기
            g.fillRect(ix, iy, width, height);       // 사각형 채우기
            break;
    }
}
```

2. Coding





실습 3 : Menu (3)

❖ [Line] 메뉴 Event Handler

◆ Event

- ActionPerformed
- menuKeyPressed

```
MainFrame.java * - Editor
MainFrame.java * x
Source Design
246
247 private void mnuGraphic_LineMenuKeyPressed(javax.swing.event.MenuKeyEvent
248     this.setTitle("Line 메뉴 클릭");
249     ix = 150;
250     iy = 150;
251     iMenu_idx = 31;
252     this.repaint();
253 }
254
255 private void mnuGraphic_LineActionPerformed(java.awt.event.ActionEvent evt) {
256     this.setTitle("Line 메뉴 클릭");
257     ix = 150;
258     iy = 150;
259     iMenu_idx = 31;
260     this.repaint();
261 }
262
58:14 INS
```

3. Coding





실습 3 : Menu (4)

❖ [Ellipse] 메뉴 Event Handler

◆ Event

- ActionPerformed
- menuKeyPressed

```
MainFrame.java * - Editor
MainFrame.java * x
Source Design
263 private void mnuGraphic_EllipseActionPerformed(java.awt.event.ActionEvent evt) {
264     this.setTitle("Ellipse 메뉴 클릭");
265     ix = iy = 150;
266     width = height = 100;
267     iMenu_idx = 32;
268     this.repaint();
269 }
270
271 private void mnuGraphic_EllipseMenuKeyPressed(javax.swing.event.MenuKeyEvent
272     this.setTitle("Ellipse 메뉴 클릭");
273     ix = iy = 150;
274     width = height = 100;
275     iMenu_idx = 32;
276     this.repaint();
277 }
278
58:14 INS
```

4. Coding





실습 3 : Menu (5)

❖ [Rectangle] 메뉴 Event Handler

◆ Event

- ActionPerformed
- menuKeyPressed

```
MainFrame.java - Editor
MainFrame.java *
Source Design
279 private void mnuGraphic_RectangleActionPerformed(java.awt.event.ActionEvent evt) {
280     this.setTitle("Rectangle 메뉴 클릭");
281     ix = iy = 150;
282     width = height = 100;
283     iMenu_idx = 33;
284     this.repaint();
285 }
286
287 private void mnuGraphic_RectangleMenuKeyPressed(javax.swing.event.MenuKeyEvent
288     this.setTitle("Rectangle 메뉴 클릭");
289     ix = iy = 150;
290     width = height = 100;
291     iMenu_idx = 33;
292     this.repaint();
293 }
294
```

5. Coding

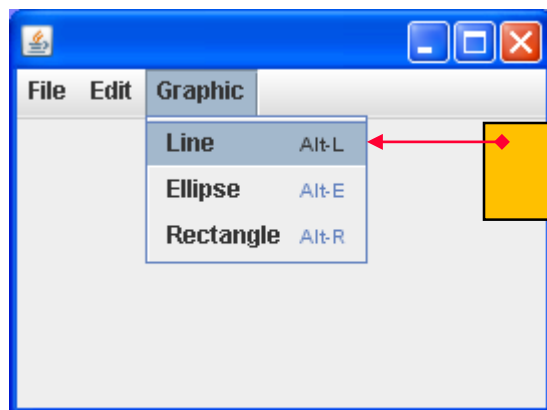




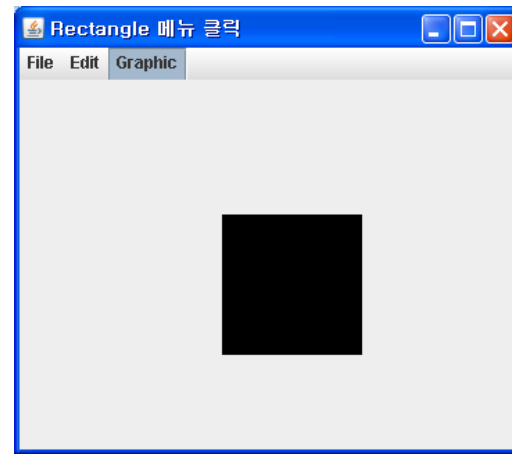
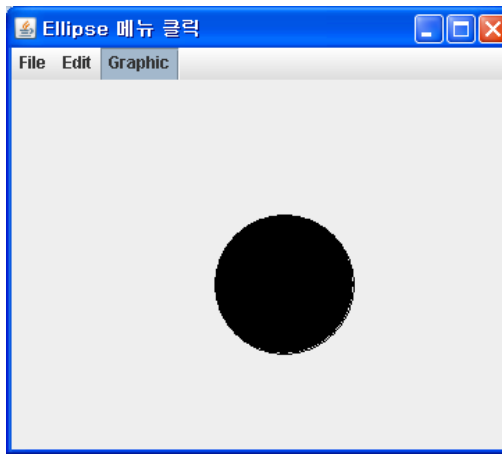
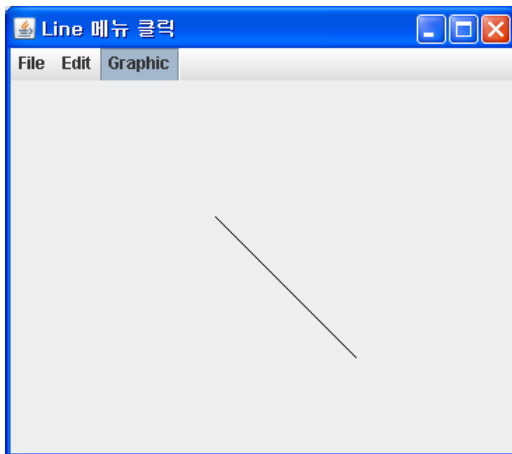
실습 3 : Menu (6)

■ 실행 결과

❖ [Line/Ellipse/Rectangle] 메뉴 클릭



6. 클릭 / Alt + L 키 입력





Pop Up Menu

■ Pop Up Menu

❖ 구성

구성 요소	클래스
메뉴바	Java.awt.MenuBar
메뉴	Java.awt.Menu
메뉴 아이템	Java.awt.MenuItem

❖ MenuBar 클래스 객체 생성

```
MenuBar mnuBar = new MenuBar();
```



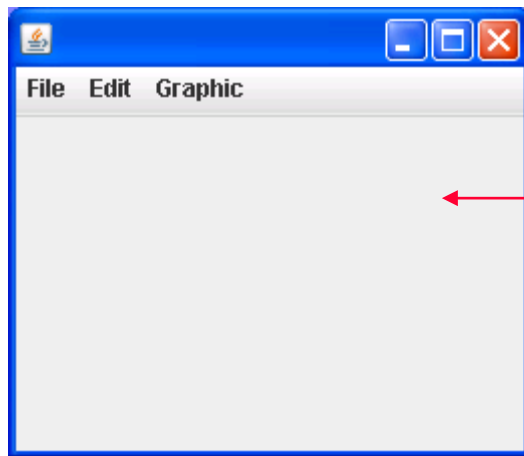


실습 4 : Pop Up Menu

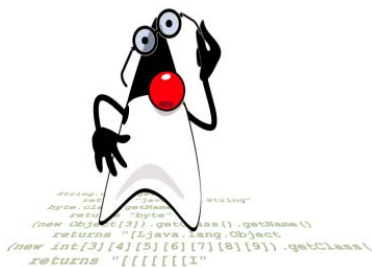
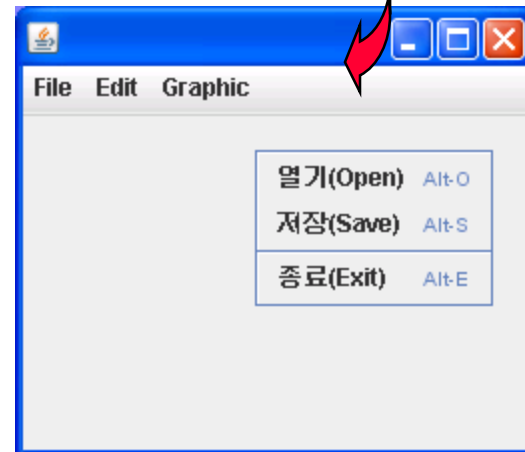
❖ Project Name: Menu_Source(실습시간 : 30분)

■ [PopUP] 메뉴 구현

- Mouse 오른쪽 button 클릭 : File 메뉴의 하위 메뉴들로 구성된 PopUp 메뉴 구현



마우스 오른쪽 버튼 클릭

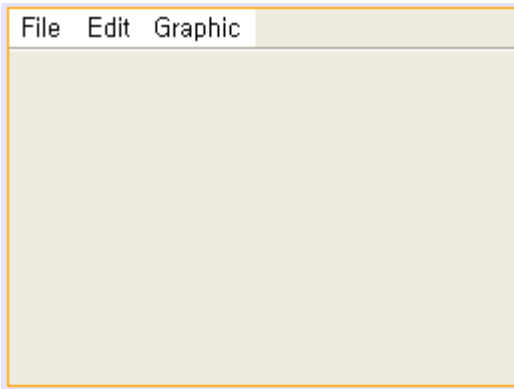




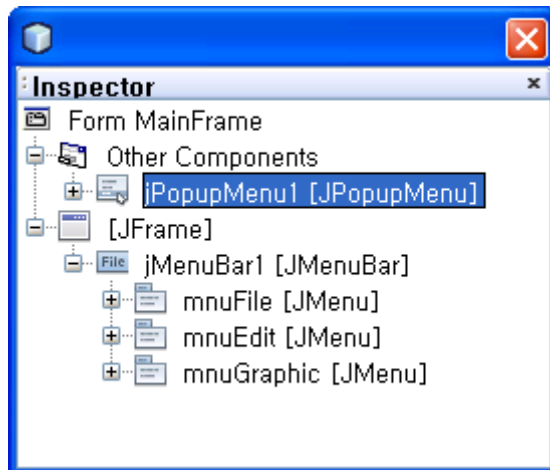
실습 4 : Pop Up Menu (1)

■ 컨트롤 배치 및 속성 지정

❖ PopupMenu



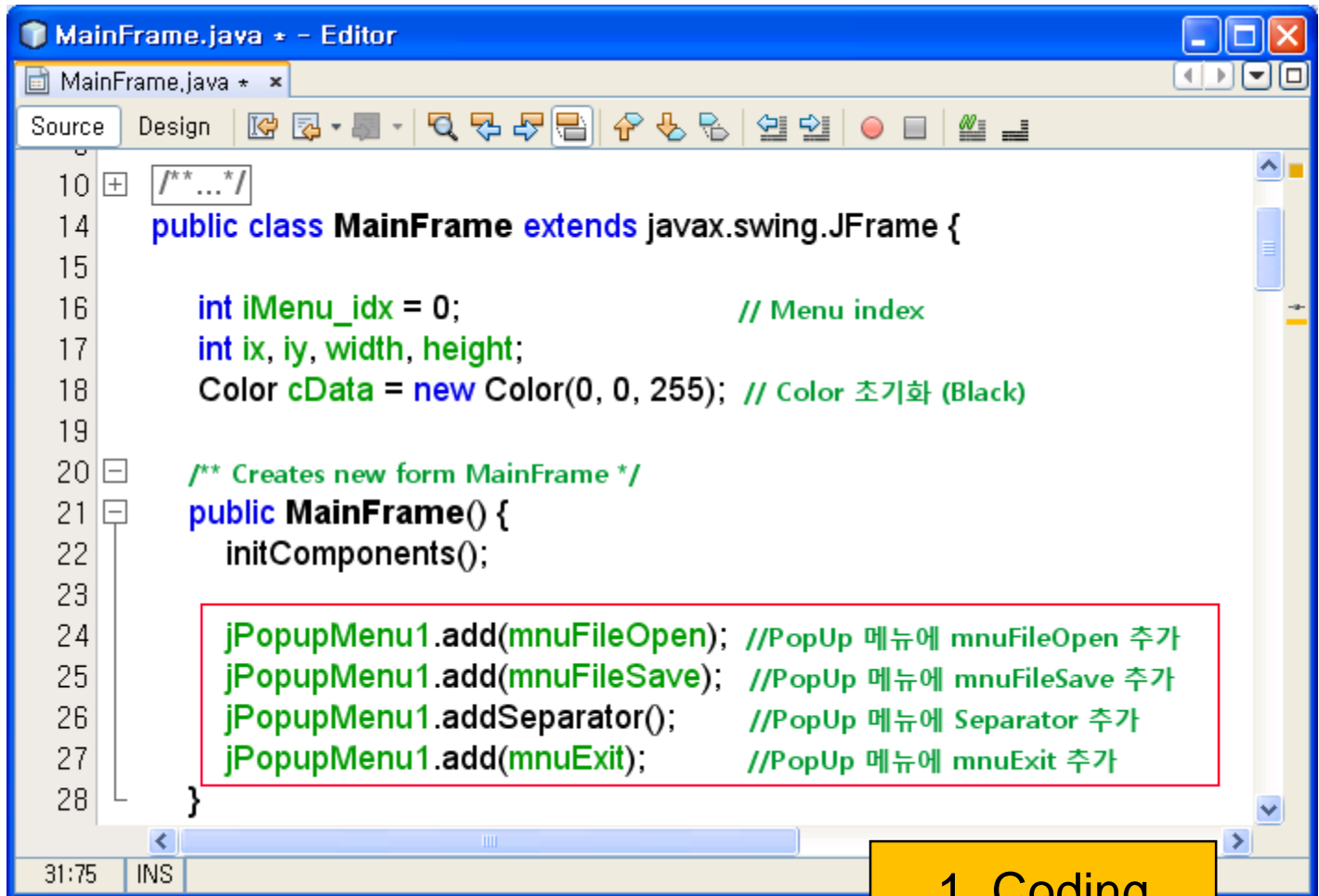
컨트롤	속성 지정
jPopupMenu1	• Variable Name : jPopupMenu1





실습 4 : Pop Up Menu (2)

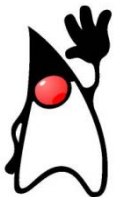
❖ jPopupMenu1에 menuitem 추가



```
10  /** ... */
14  public class MainFrame extends javax.swing.JFrame {
15
16      int iMenu_idx = 0;                // Menu index
17      int ix, iy, width, height;
18      Color cData = new Color(0, 0, 255); // Color 초기화 (Black)
19
20      /** Creates new form MainFrame */
21      public MainFrame() {
22          initComponents();
23
24          jPopupMenu1.add(mnuFileOpen); //PopUp 메뉴에 mnuFileOpen 추가
25          jPopupMenu1.add(mnuFileSave); //PopUp 메뉴에 mnuFileSave 추가
26          jPopupMenu1.addSeparator();   //PopUp 메뉴에 Separator 추가
27          jPopupMenu1.add(mnuExit);     //PopUp 메뉴에 mnuExit 추가
28      }
```

31:75 INS

1. Coding



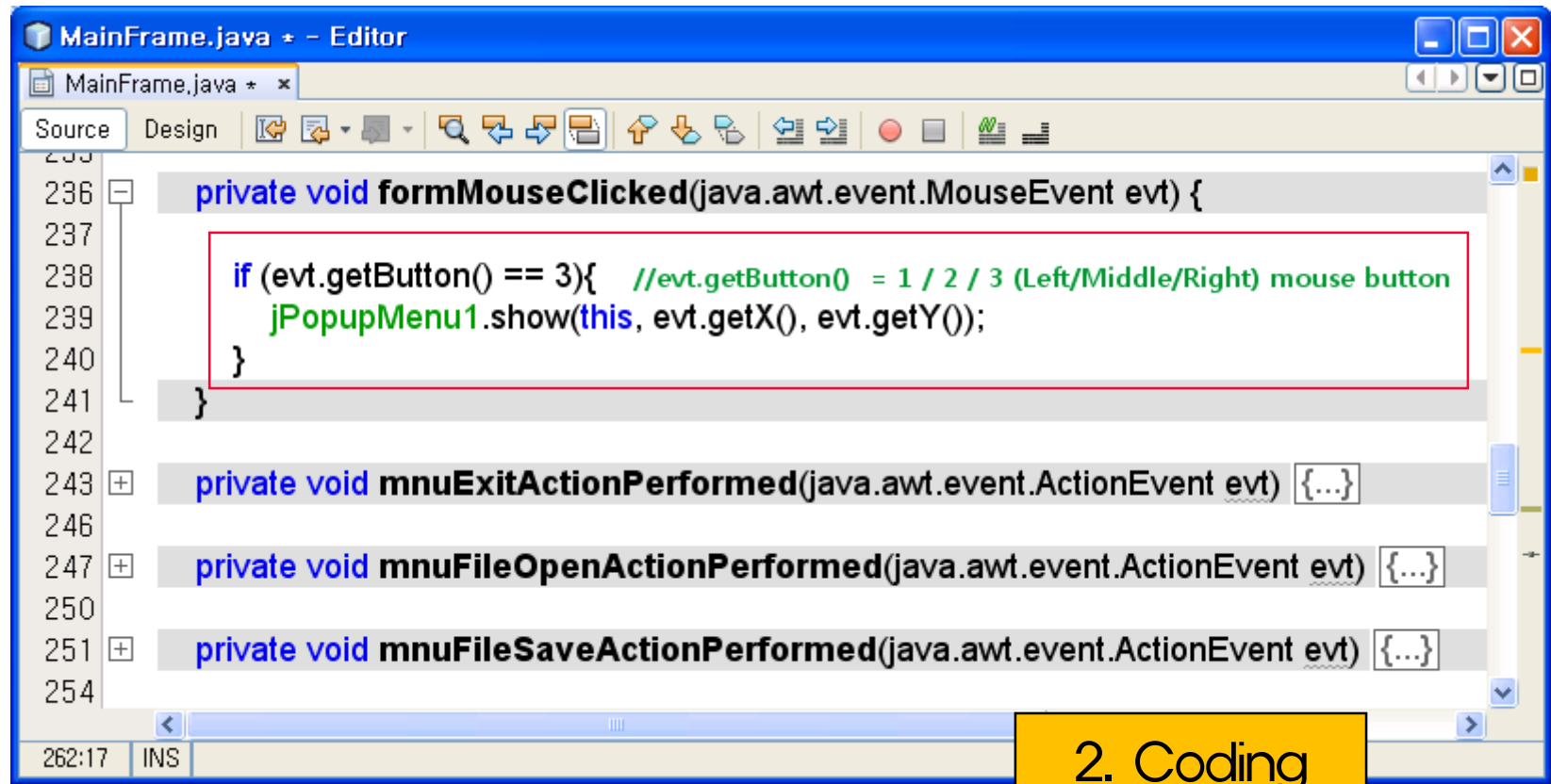


실습 4 : Pop Up Menu (3)

❖ formMouseClicked Event Handler

◆ Event

- MouseClicked



```
MainFrame.java * - Editor
MainFrame.java * x
Source Design [Icons]
235
236 private void formMouseClicked(java.awt.event.MouseEvent evt) {
237     if (evt.getButton() == 3){ //evt.getButton() = 1 / 2 / 3 (Left/Middle/Right) mouse button
238         jPopupMenu1.show(this, evt.getX(), evt.getY());
239     }
240 }
241
242
243 private void mnuExitActionPerformed(java.awt.event.ActionEvent evt) {...}
246
247 private void mnuFileOpenActionPerformed(java.awt.event.ActionEvent evt) {...}
250
251 private void mnuFileSaveActionPerformed(java.awt.event.ActionEvent evt) {...}
254
262:17 INS
```

2. Coding

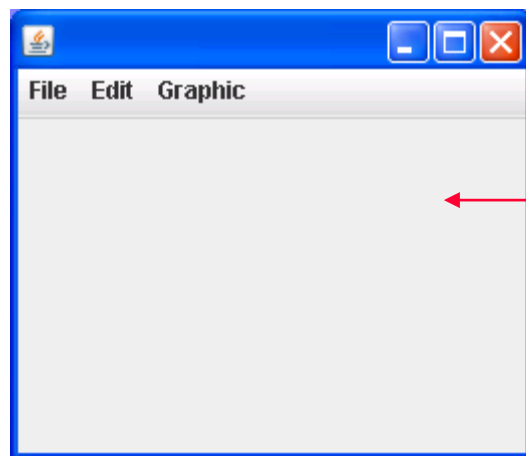




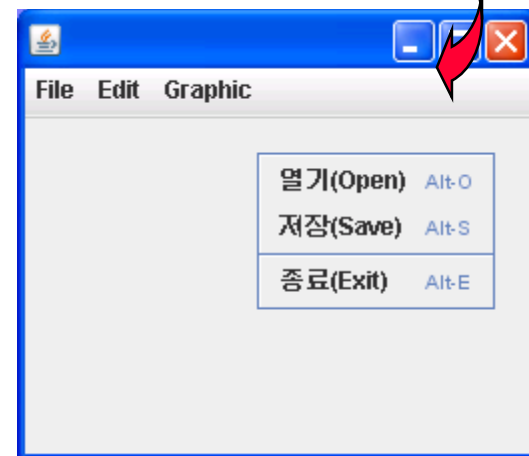
실습 4 : Pop Up Menu (4)

■ 실행 결과

- ❖ 마우스 오른쪽 버튼 클릭
- ❖ Popup Menu 실행 결과 확인



3. 마우스 오른쪽 버튼 클릭





Font Class

■ Font 클래스

❖ 기능

- ◆ 글꼴의 속성이나 스타일 설정

❖ 구성


```
Font(String strFontName, int style, int size)
```





- [Font] 메뉴 구현

- Arial : 문자열을 Arial로 출력
- 궁서체 : 문자열을 궁서체로 출력
- 돋움체 : 문자열을 돋움체로 출력



```

//String s = "1234567890";
//byte[] b = s.getBytes();
//String s2 = new String(b);
(new Object() {
    returns "I'm java.lang.Object";
}).getClass().getName();
(new Integer(3)).getClass().getName();
returns "[[[[[[[I]]]]]]";

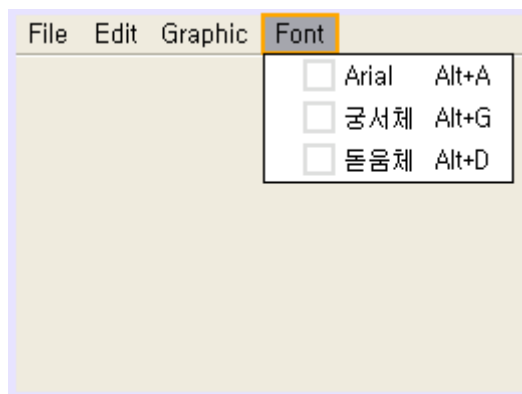
```




실습 5 : Font (1)

■ 컨트롤 배치 및 속성 지정

❖ Font Menu



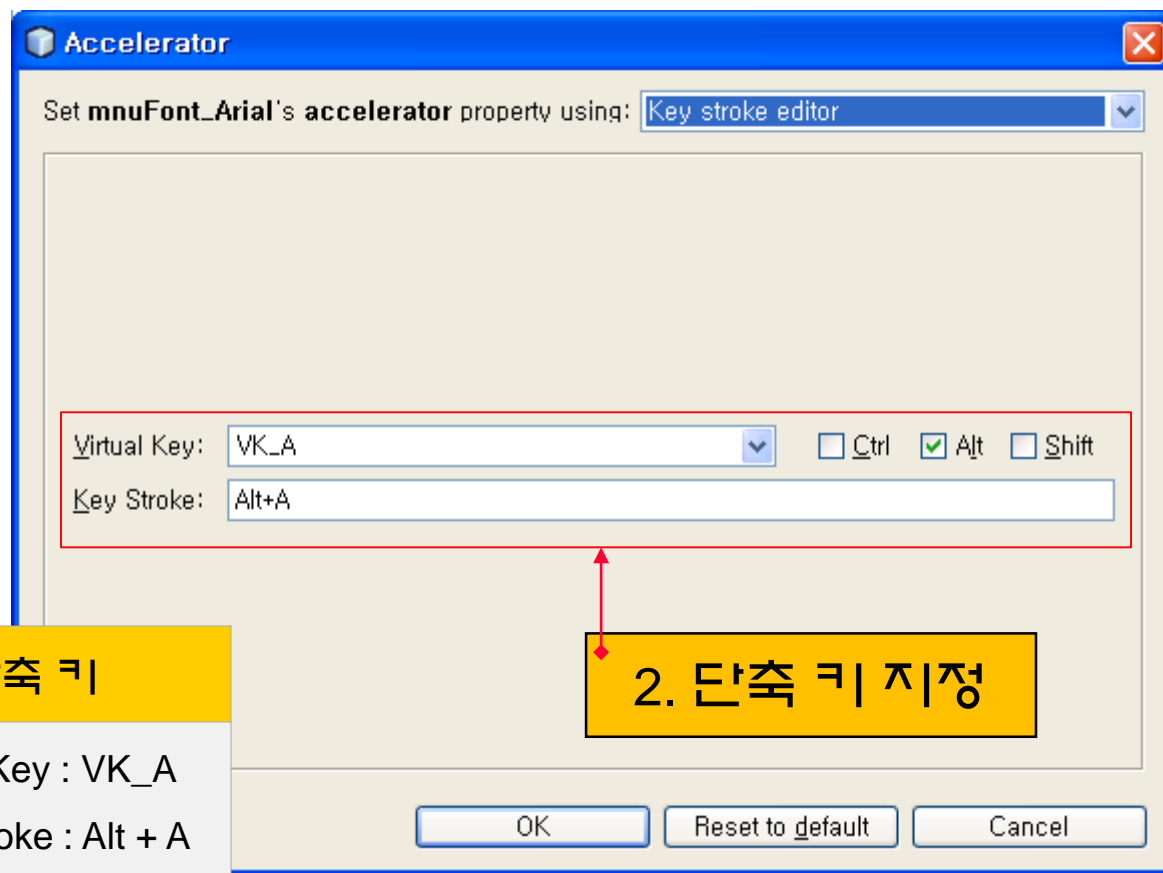
1. GUI 구현

컨트롤	속성 지정
jMenu1	<ul style="list-style-type: none">• Variable Name : mnuFont• Text : Font
jMenuItem1	<ul style="list-style-type: none">• Variable Name : mnuFont_Arial• Text : Arial
jMenuItem2	<ul style="list-style-type: none">• Variable Name : mnuFont_Gungseo• Text : 궁서체
jMenuItem3	<ul style="list-style-type: none">• Variable Name : mnuFont_Dotum• Text : 돋움체





실습 5 : Font (2)



메뉴	단축 키
Arial	<ul style="list-style-type: none">• Virtual Key : VK_A• Key Stroke : Alt + A
궁서체	<ul style="list-style-type: none">• Virtual Key : VK_G• Key Stroke : Alt + G
돋움체	<ul style="list-style-type: none">• Virtual Key : VK_D• Key Stroke : Alt + D





실습 5 : Font (3)

❖ Font 구현을 위한 멤버 변수 선언

```
MainFrame.java - Editor
MainFrame.java *
Source Design
10
14 public class MainFrame extends javax.swing.JFrame {
15
16     int iMenu_idx = 0;                // Menu index
17     int ix, iy, width, height;
18     Color cData = new Color(0, 0, 255); // Color 초기화 (Black)
19
20     Font objFont;                    //Font Class의 객체 선언
21     String strData = null;           //출력 문자열 저장 변수
22
23     /** Creates new form MainFrame */
24     public MainFrame() {
25         initComponents();
26
27         jPopupMenu1.add(mnuFileOpen);
28         jPopupMenu1.add(mnuFileSave);
29         jPopupMenu1.addSeparator();
30         jPopupMenu1.add(mnuExit);
31     }
40:21 INS
```

3. Coding



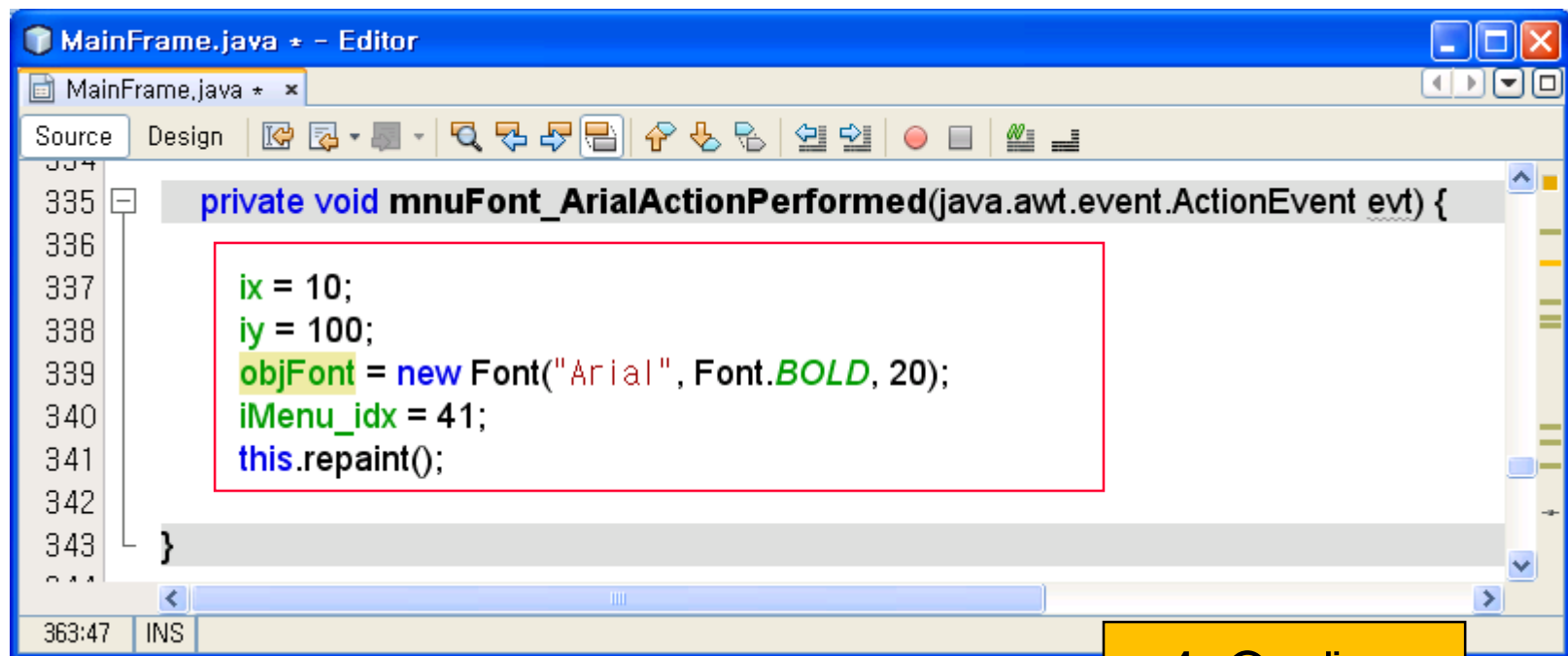


실습 5 : Font (4)

❖ mnuFont_ArialActionPerformed Event Handler

◆ Event

- ActionPerformed



```
MainFrame.java - Editor
MainFrame.java *
Source Design
334
335 private void mnuFont_ArialActionPerformed(java.awt.event.ActionEvent evt) {
336
337     ix = 10;
338     iy = 100;
339     objFont = new Font("Arial", Font.BOLD, 20);
340     iMenu_idx = 41;
341     this.repaint();
342
343 }
344
363:47 INS
```

4. Coding





실습 5 : Font (5)

❖ mnuFont_GungseoActionPerformed Event Handler

◆ Event

- ActionPerformed

```
MainFrame.java * - Editor
MainFrame.java * x
Source Design
318 private void mnuFont_GungseoActionPerformed(java.awt.event.ActionEvent evt) {
319
320     ix = 10;
321     iy = 100;
322     objFont = new Font("궁서체", Font.BOLD, 20);
323     iMenu_idx = 42;
324     this.repaint();
325
326 }
327
329:17 INS
```

5. Coding





실습 5 : Font (6)

❖ mnuFont_DotumActionPerformed Event Handler

◆ Event

- ActionPerformed

```
MainFrame.java * - Editor
MainFrame.java * x
Source Design
328 private void mnuFont_DotumActionPerformed(java.awt.event.ActionEvent evt) {
329
330     ix = 10;
331     iy = 100;
332     objFont = new Font("돋움체", Font.BOLD, 20);
333     iMenu_idx = 43;
334     this.repaint();
335
336 }
337
339:9 INS
```

6. Coding





실습 5 : Font (7)

❖ Paint() 메서드 구현

```
MainFrame.java - Editor
MainFrame.java
Source Design
public void paint(Graphics g)
{
    //g.clearRect(0, 53, this.getWidth(), this.getHeight());
    super.paintComponents(g);
    switch( iMenu_idx){
        case 31:
            g.drawLine(ix, iy, 250, 250);           // Line 그리기
            break;
        case 32:
            g.drawOval(ix, iy, width, height);       // 타원 그리기
            g.fillOval(ix, iy, width, height);       // 타원 채우기
            break;
        case 33:
            g.drawRect(ix, iy, width, height);       // 사각형 그리기
            g.fillRect(ix, iy, width, height);       // 사각형 채우기
            break;
        case 41:
            strData = "Arial font" ;
            g.setFont(objFont);
            g.drawString(strData, ix, iy);
            break;
        case 42:
            strData = "궁서체 입니다." ;
            g.setFont(objFont);
            g.drawString(strData, ix, iy);
            break;
        case 43:
            strData = "돋움체 입니다." ;
            g.setFont(objFont);
            g.drawString(strData, ix, iy);
            break;
        default:
            break;
    }
}
```

7. Coding



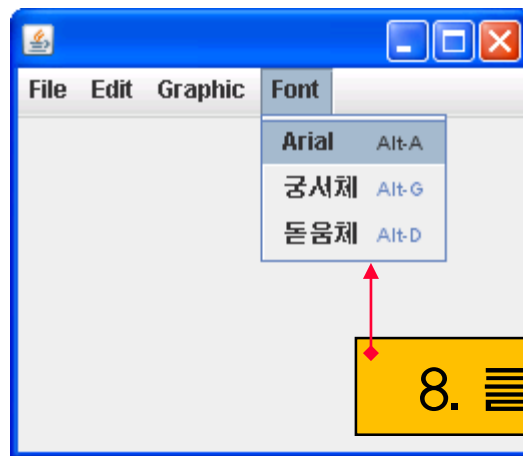


실습 5 : Font (8)

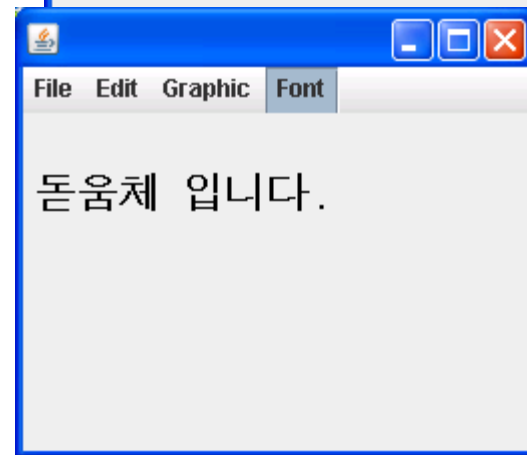
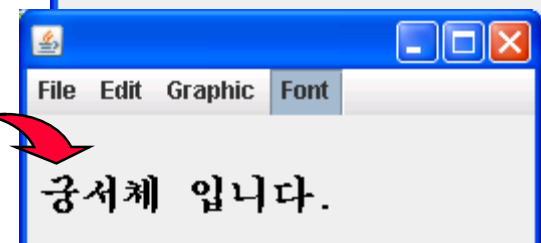
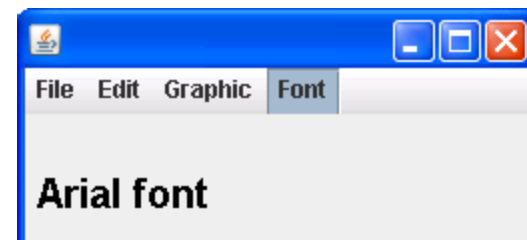
■ 실행 결과

❖ [Font] 메뉴 클릭

◆ Arial, 궁서체, 돋움체



8. 클릭





Homework # 1

❖ Project Name: Client Editor 소스 분석

▪ Client Editor 프로젝트

- New Project > Samples > Java > Client Editor

The screenshot displays the NetBeans IDE interface. On the left, the 'Client Editor' application window is open, showing 'Client Info: George Foo'. It has two tabs: 'Personal' and 'Contact'. The 'Personal' tab is active, showing fields for First Name (George), Surname (Foo), Marital status (Separated), Age (30), and Sex (male selected). On the right, the 'New Project' wizard is open. The 'Steps' pane shows '1. Choose Project'. The 'Choose Project' pane shows a tree of categories with 'Samples' expanded and 'Java' selected. The 'Projects' pane shows 'Client Editor' selected. The 'Description' pane contains the text: 'A simple editor of client information. Demonstrates use of **Beans Binding**. Includes examples of converters and validators.' At the bottom, there is a note: 'Note that samples are instructional and may not include all security mechanisms required for a production environment.' Navigation buttons at the bottom include '< Back', 'Next >', 'Finish', 'Cancel', and 'Help'.

New Project

Steps

1. Choose Project
2. ...

Choose Project

Filter:

Categories:

- Java
- JavaFX
- Maven
- NetBeans Modules
- Samples
 - Java
 - JavaFX
 - NetBeans Modules

Projects:

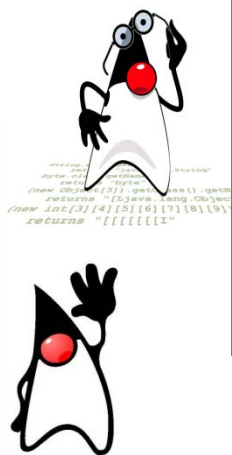
- Anagram Game
- GUI Form Examples
- Client Editor

Description:

A simple editor of client information. Demonstrates use of **Beans Binding**. Includes examples of converters and validators.

Note: Note that samples are instructional and may not include all security mechanisms required for a production environment.

< Back Next > Finish Cancel Help





학습 요약

- Menu
- Menu Event Handler
- PopUp Menu
- Graphic
- Font

