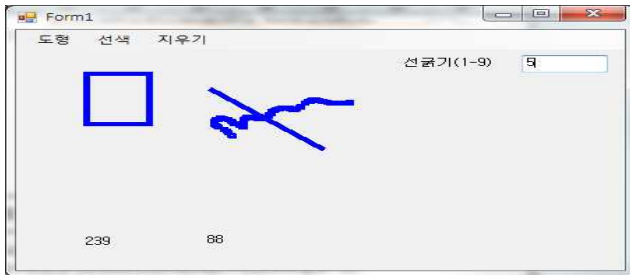


10장 퀴즈문제 : 그림판 프로그램

● 다음과 같은 프로그램을 작성하시오.



[실행화면]



[프로그램 소스]

```
Color linecolor=Color.Black;
int linewidth=1;
int shapestyle=0;
Point start;

Boolean button_flag = false
Boolean eraser_flag = false

private void mnu_line_Click(object sender, EventArgs e)
{
    shapestyle = 1;
}

private void mnu_rec_Click(object sender, EventArgs e)
{
    shapestyle = 2;
}

private void mnu_freepen_Click(object sender, EventArgs e)
{
    shapestyle = 3;
}

private void mnu_red_Click(object sender, EventArgs e)
{
    linecolor = Color.Red;
}

private void mnu_yellow_Click(object sender, EventArgs e)
{
    linecolor = Color.???;
}

private void mnu_blue_Click(object sender, EventArgs e)
{
    linecolor = Color.???;
}

private void mnu_allclear_Click(object sender, EventArgs e)
{
    Graphics g = CreateGraphics();
    ????.Clear(System.Drawing.SystemColors.Control);
}

private void mnu_eraser_Click(object sender, EventArgs e)
{
    eraser_flag = ???; //boolean 값 설정
}
```

```
private void textBox1_KeyPress(object sender,
KeyPressEventArgs e)
{
    if (e.??? > '0' && e.??? <= '9')
        //1에 9까지 입력이면 그 값을 저장
        linewidth = (int)e.??? - '0'
    else
        MessageBox.???("입력된 값이 범위를 벗어남!");
}

private void Form1_MouseDown(object sender,
MouseEventArgs e)
{
    start = new Point(e.???, e.???) //현재 위치를 저장

    if ((shapestyle == 1 || shapestyle == 2 ) &&
        MouseButtons.Left == ????.Button )
        button_flag = ???; //boolean 값 설정
}

private void Form1_MouseUp(object sender,
MouseEventArgs e)
{
    int width, height;
    Graphics g = CreateGraphics();
    width = Math.Abs(start.??? - e.???)
    height = Math.Abs(start.??? - e.???)
    Pen p = new Pen(linecolor, linewidth);

    if (start.X > e.X) //
        start.??? = e.???;
    if (start.Y > e.Y)
        start.??? = e.???;

    if (button_flag == ???)
    {
        switch (shapestyle)
        {
            case ????: // 선 그리기
                ????.DrawLine(p, start.X, start.Y, e.X, e.Y);
                break;
            case ????: //사각형 그리기
                ????.DrawRectangle(p, start.X, start.Y, width, height);
                break;
        }
    }

    button_flag = ???;
    eraser_flag = ???;
    shapestyle=3; //shapestyle =0;
}

private void Form1_MouseMove(object sender,
MouseEventArgs e)
{
    Graphics g = CreateGraphics();
    Rectangle r = new Rectangle(e.X - 1, e.Y - 1, 1, 1);

    if(shapestyle==??? && MouseButtons.Left==????.Button )
    {
        Pen p = new ???(linecolor, linewidth);
        g.DrawRectangle(p, r);
        label2.Text = ????.X.ToString();
        label3.Text = ????.Y.ToString();
    }

    if(eraser_flag==??? && MouseButtons.Left==????.Button)
    {
        Pen p = new Pen(System.Drawing.SystemColors.Control,
linewidth);

        ????.DrawRectangle(p, r);
        label2.Text = ????.X.ToString();
        label3.Text = ????.Y.ToString();
    }
}
```