

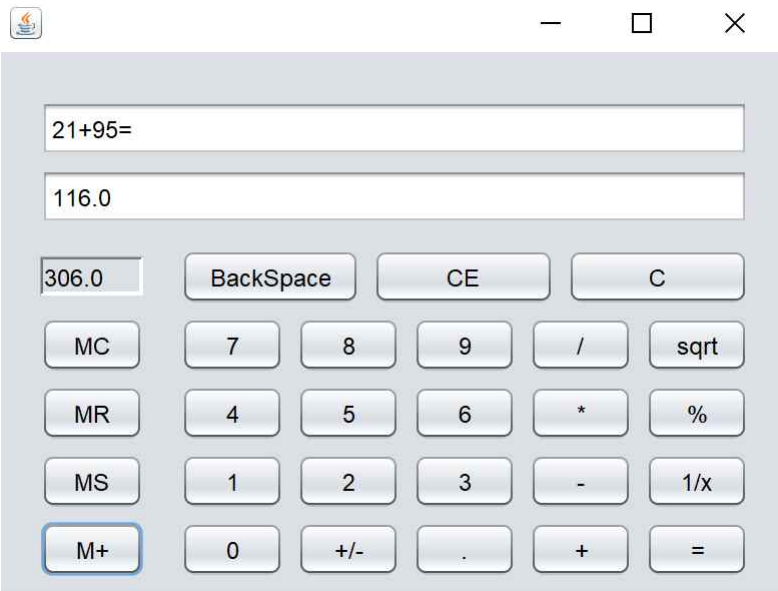
JAVA 과제

계산기, 회원가입 프로그램

컴퓨터 정보과 2A

201944031 박민우

계산기



계산기 소스코드

```
import java.awt.List;
import java.util.ArrayList;
public class MainFrame extends javax.swing.JFrame {
    ArrayList<String> operator = new ArrayList<String>();
    ArrayList<String> operand = new ArrayList<String>();
    ArrayList<String> memory = new ArrayList<String>();

    public MainFrame() {
        initComponents();
    }

    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">
    private void initComponents() {
        ...
    }

    private void btn1ActionPerformed(java.awt.event.ActionEvent evt) {
        String current = tbxResult.getText();
        current += 1;
        tbxResult.setText(current);
    }

    private void btn0ActionPerformed(java.awt.event.ActionEvent evt) {
        String current = tbxResult.getText();
        current += 0;
        tbxResult.setText(current);
    }

    private void btn2ActionPerformed(java.awt.event.ActionEvent evt) {
        String current = tbxResult.getText();
        current += 2;
        tbxResult.setText(current);
    }

    private void btn3ActionPerformed(java.awt.event.ActionEvent evt) {
        String current = tbxResult.getText();
        current += 3;
    }
}
```

```
        tbxResult.setText(current);
    }
}
```

```
private void btn4ActionPerformed(java.awt.event.ActionEvent evt) {
    String current = tbxResult.getText();
    current += 4;
    tbxResult.setText(current);
}
```

```
private void btn5ActionPerformed(java.awt.event.ActionEvent evt) {
    String current = tbxResult.getText();
    current += 5;
    tbxResult.setText(current);
}
```

```
private void btn6ActionPerformed(java.awt.event.ActionEvent evt) {
    String current = tbxResult.getText();
    current += 6;
    tbxResult.setText(current);
}
```

```
private void btn7ActionPerformed(java.awt.event.ActionEvent evt) {
    String current = tbxResult.getText();
    current += 7;
    tbxResult.setText(current);
}
```

```
private void btn8ActionPerformed(java.awt.event.ActionEvent evt) {
    String current = tbxResult.getText();
    current += 8;
    tbxResult.setText(current);
}
```

```
private void btn9ActionPerformed(java.awt.event.ActionEvent evt) {
    String current = tbxResult.getText();
    current += 9;
    tbxResult.setText(current);
}
```

```
private void btnBackspaceActionPerformed(java.awt.event.ActionEvent evt) {
```

```

String current = tbxResult.getText();
String cut = current.substring(0, current.length()-1);
tbxResult.setText(cut);
}

```

```

private void btnPlusActionPerformed(java.awt.event.ActionEvent evt) {

```

```

    String current = tbxResult.getText();
    double result = 0;
    if (operator.isEmpty()){
        tbxProcess.setText(current + "+");
        operand.add(current);
        operator.add("+");
        tbxResult.setText("");
    }
    else {
        operand.add(current);
        for (int i=0; i<operator.size(); i++){
            if (i == 0){
                if(operator.get(i).equals("+")){
                    result = Double.parseDouble(operand.get(i)) + Double.parseDouble(operand.get(i+1));
                }
                if(operator.get(i).equals("-")){
                    result = Double.parseDouble(operand.get(i)) - Double.parseDouble(operand.get(i+1));
                }
                if(operator.get(i).equals("*")){
                    result = Double.parseDouble(operand.get(i)) * Double.parseDouble(operand.get(i+1));
                }
                if(operator.get(i).equals("/")){
                    result = Double.parseDouble(operand.get(i)) / Double.parseDouble(operand.get(i+1));
                }
            }
        }
        tbxProcess.setText(Double.toString(result) + "+");
        tbxResult.setText("");
        operand.clear();
        operand.add(Double.toString(result));
        operator.clear();
        operator.add("+");
    }
}

```

```
}
```

```
private void btnMinusActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    String current = tbxResult.getText();
```

```
    double result = 0;
```

```
    if (operator.isEmpty()){
```

```
        tbxProcess.setText(current + "-");
```

```
        operand.add(current);
```

```
        operator.add("-");
```

```
        tbxResult.setText("");
```

```
    }
```

```
    else {
```

```
        operand.add(current);
```

```
        for (int i=0; i<operator.size(); i++){
```

```
            if (i == 0){
```

```
                if(operator.get(i).equals("+")){
```

```
                    result = Double.parseDouble(operand.get(i)) + Double.parseDouble(operand.get(i+1));
```

```
                }
```

```
                if(operator.get(i).equals("-")){
```

```
                    result = Double.parseDouble(operand.get(i)) - Double.parseDouble(operand.get(i+1));
```

```
                }
```

```
                if(operator.get(i).equals("*")){
```

```
                    result = Double.parseDouble(operand.get(i)) * Double.parseDouble(operand.get(i+1));
```

```
                }
```

```
                if(operator.get(i).equals("/")){
```

```
                    result = Double.parseDouble(operand.get(i)) / Double.parseDouble(operand.get(i+1));
```

```
                }
```

```
            }
```

```
        }
```

```
        tbxProcess.setText(Double.toString(result) + "-");
```

```
        tbxResult.setText("");
```

```
        operand.clear();
```

```
        operand.add(Double.toString(result));
```

```
        operator.clear();
```

```
        operator.add("-");
```

```
    }
```

```
}
```

```
private void btnMulActionPerformed(java.awt.event.ActionEvent evt) {
```

```

String current = tbxResult.getText();
double result = 0;
if (operator.isEmpty()){
    tbxProcess.setText(current + "*");
    operand.add(current);
    operator.add("*");
    tbxResult.setText("");
}
else {
    operand.add(current);
    for (int i=0; i<operator.size(); i++){
        if (i == 0){
            if(operator.get(i).equals("+")){
                result = Double.parseDouble(operand.get(i)) + Double.parseDouble(operand.get(i+1));
            }
            if(operator.get(i).equals("-")){
                result = Double.parseDouble(operand.get(i)) - Double.parseDouble(operand.get(i+1));
            }
            if(operator.get(i).equals("*")){
                result = Double.parseDouble(operand.get(i)) * Double.parseDouble(operand.get(i+1));
            }
            if(operator.get(i).equals("/")){
                result = Double.parseDouble(operand.get(i)) / Double.parseDouble(operand.get(i+1));
            }
        }
    }
    tbxProcess.setText(Double.toString(result) + "");
    tbxResult.setText("");
    operand.clear();
    operand.add(Double.toString(result));
    operator.clear();
    operator.add("*");
}
}

```

```

private void btnDivActionPerformed(java.awt.event.ActionEvent evt) {

```

```

    String current = tbxResult.getText();
    double result = 0;
    if (operator.isEmpty()){
        tbxProcess.setText(current + "/");

```

```

        operand.add(current);
        operator.add("/");
        tbxResult.setText("");
    }
    else {
        operand.add(current);
        for (int i=0; i<operator.size(); i++){
            if (i == 0){
                if(operator.get(i).equals("+")){
                    result = Double.parseDouble(operand.get(i)) + Double.parseDouble(operand.get(i+1));
                }
                if(operator.get(i).equals("-")){
                    result = Double.parseDouble(operand.get(i)) - Double.parseDouble(operand.get(i+1));
                }
                if(operator.get(i).equals("*")){
                    result = Double.parseDouble(operand.get(i)) * Double.parseDouble(operand.get(i+1));
                }
                if(operator.get(i).equals("/")){
                    result = Double.parseDouble(operand.get(i)) / Double.parseDouble(operand.get(i+1));
                }
            }
        }
        tbxProcess.setText(Double.toString(result) + "/");
        tbxResult.setText("");
        operand.clear();
        operand.add(Double.toString(result));
        operator.clear();
        operator.add("/");
    }
}

```

```

private void btnEqualActionPerformed(java.awt.event.ActionEvent evt) {

```

```

    if(tbxProcess.getText().equals("")){
        tbxResult.setText(tbxResult.getText());
        return;
    }
    String a = tbxProcess.getText();
    String finalOperand = a.substring(0,a.length()-1);
    String finalOperation = a.substring(a.length()-1,a.length());
    String current = tbxResult.getText();

```



```
double result = 0;
```

```
if(finalOperation.equals("+")){
    result = Double.parseDouble(finalOperand) + Double.parseDouble(current);
}
if(finalOperation.equals("-")){
    result = Double.parseDouble(finalOperand) - Double.parseDouble(current);
}
if(finalOperation.equals("*")){
    result = Double.parseDouble(finalOperand) * Double.parseDouble(current);
}
if(finalOperation.equals("/")){
    result = Double.parseDouble(finalOperand) / Double.parseDouble(current);
}
}
```

```
operator.clear();
operand.clear();
operand.add(Double.toString(result));
tbxResult.setText(Double.toString(result));
tbxProcess.setText(a + current + "=");
}
```

```
private void tbxProcessActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
}
```

```
private void btnSqrtActionPerformed(java.awt.event.ActionEvent evt) {

    Double current = Double.parseDouble(tbxResult.getText());
    Double sqrt = Math.sqrt(current);
    tbxResult.setText(Double.toString(sqrt));
}
```

```
private void btnRestActionPerformed(java.awt.event.ActionEvent evt) {

    Double current = Double.parseDouble(tbxResult.getText());
    Double rest = current / 100;
    tbxResult.setText(Double.toString(rest));
}
```

```
}
```

```
private void btnCActionPerformed(java.awt.event.ActionEvent evt) {  
    tbxResult.setText("");  
    tbxProcess.setText("");  
    operand.clear();  
    operator.clear();  
}
```

```
private void btnCEActionPerformed(java.awt.event.ActionEvent evt) {  
    tbxResult.setText("");  
}
```

```
private void btnBacksetActionPerformed(java.awt.event.ActionEvent evt) {  
  
    Double current = Double.parseDouble(tbxResult.getText());  
    Double backset = 1 / current;  
    tbxResult.setText(Double.toString(backset));  
}
```

```
private void btnNegateActionPerformed(java.awt.event.ActionEvent evt) {  
  
    Double current = Double.parseDouble(tbxResult.getText());  
    Double negate = current * -1;  
    tbxResult.setText(Double.toString(negate));  
}
```

```
private void btnPointActionPerformed(java.awt.event.ActionEvent evt) {  
  
    String current = tbxResult.getText();  
    String check = current.substring(current.length()-1,current.length());  
    if (check.equals(".")){  
        tbxResult.setText(current.substring(0,current.length()-1));  
        current = tbxResult.getText();  
    }  
    current += ".";  
    tbxResult.setText(current);  
}
```

```
private void btnMSActionPerformed(java.awt.event.ActionEvent evt) {  
    String current = tbxResult.getText();
```

```

        memory.add(current);
        lblMemory.setText(memory.get(memory.size()-1));
    }

    private void btnMRActionPerformed(java.awt.event.ActionEvent evt) {
        String value = memory.get(memory.size()-1);
        tbxResult.setText(value);
    }

    private void btnMCAActionPerformed(java.awt.event.ActionEvent evt) {
        memory.clear();
        lblMemory.setText("");
    }

    private void btnMPlusActionPerformed(java.awt.event.ActionEvent evt) {

        if(memory.isEmpty()){
            memory.add(tbxResult.getText());
            lblMemory.setText(memory.get(memory.size()-1));
            return;
        }
        String memory_op = memory.get(memory.size()-1);
        String input_op = tbxResult.getText();
        Double op1 = Double.parseDouble(memory_op);
        Double op2 = Double.parseDouble(input_op);
        Double result = op1 + op2;
        memory.clear();
        memory.add(Double.toString(result));
        lblMemory.setText(memory.get(memory.size()-1));
    }
}

```

회원가입 프로그램

회원 가입

아이디: 201944031 중복 확인

비밀번호: *****

비밀번호 확인: *****

성명: 박민우

회원 구분: ☒ 정회원 ☐ 준회원 ☐ 학생회원

관심 분야: ☒ 수영 ☐ 게임 ☐ 골프
☐ 스키 ☐ 독서 ☐ 테니스

직업: 학생 ▼

결제 방법: 현금 ▼

회원가입

회원 가입

아이디: 201944031 중복 확인

비밀번호: *****

비밀번호 확인: *****

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회원 구분: ☒ 정회원 ☐ 준회원 ☐ 학생회원


관심 분야: ☐ 수영 ☐ 게임 ☐ 골프
☐ 스키 ☐ 독서 ☐ 테니스

직업: 학생 ▼


결제 방법: 현금 ▼

회원가입

Message

 회원가입이 완료되었습니다!

OK

 member.txt - Windows 메모장

파일(F) 편집(E) 서식(O) 보기(V) 도움말(H)

201944031 qkralsdn12 박민우 회원 0 학생 현금

회원가입 소스코드

```
import java.io.BufferedReader;
import java.io.File;
import java.io.FileNotFoundException;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JOptionPane;

public class MainFrame extends javax.swing.JFrame {
    public MainFrame() {
        initComponents();
        btnSignin.setEnabled(false);
    }

    private void btnSigninActionPerformed(java.awt.event.ActionEvent evt) {

        String id = txtID.getText();
        String password = txtPassword.getText();
        String name = txtName.getText();
        String member = "";
        String job= cmbJob.getSelectedItem().toString();
```

```
String payment= cbxPayment.getSelectedItem().toString();
int habit = 0;

if(cbxMember.isSelected()){
    member = "회원";
}
if(cbxNotMember.isSelected()){
    member = "비회원";
}
if(cbxStuMember.isSelected()){
    member = "학생회원";
}

if(cbxSwim.isSelected()){
    habit += 32;
}
if(cbxGame.isSelected()){
    habit += 16;
}
if(cbxGolf.isSelected()){
    habit += 8;
}
if(cbxSki.isSelected()){
    habit += 4;
}
if(cbxBook.isSelected()){
    habit += 2;
}
if(cbxTennis.isSelected()){
    habit += 1;
}
if (tbxID.getText().isBlank()){
    JOptionPane.showMessageDialog(null,"아이디를 입력하세요!");
    return;
}
if (tbxPassword.getText().isBlank()){
    JOptionPane.showMessageDialog(null,"비밀번호를 입력하세요!");
    return;
}
if (tbxCheck.getText().isBlank()){
    JOptionPane.showMessageDialog(null,"비밀번호 확인란을 입력하세요!");
}
```

```

        return;
    }
    if (tbxName.getText().isBlank()){
        JOptionPane.showMessageDialog(null,"이름을 입력하세요!");
        return;
    }
    if(password.equals(tbxCheck.getText()) == false ){
        JOptionPane.showMessageDialog(null,"비밀번호가 다릅니다!");
        return;
    }

    File file = new File("C:\\Users\\박민우\\Desktop\\computer tec\\2_2\\Java_2\\member.txt");
    try {
        FileWriter fw = new FileWriter(file,true);
        if(file.isFile() && file.canWrite()){
            fw.append(id+" "+password+" "+name+" "+ member +" "+habit+" "+job+" "+payment+" "+
Wn");
        }
        fw.close();
    } catch (IOException ex) {
        Logger.getLogger(MainFrame.class.getName()).log(Level.SEVERE, null, ex);
    }
    JOptionPane.showMessageDialog(null,"회원가입이 완료되었습니다!");
    btnSignin.setEnabled(false);
    tbxID.setText(null);
    tbxPassword.setText(null);
    tbxCheck.setText(null);
    tbxName.setText(null);
    buttonGroup1.clearSelection();

}

private void btnCheckActionPerformed(java.awt.event.ActionEvent evt) {

    String id = tbxID.getText();

    if (id.isBlank()){
        JOptionPane.showMessageDialog(null,"아이디를 입력하세요!");
        return;
    }

```

```
File file = new File("C:\\Users\\박민우\\Desktop\\computer tec2\\Java_2\\member.txt");
```

```
try {
```

```
    FileReader fr = new FileReader(file);
```

```
    BufferedReader br = new BufferedReader(fr);
```

```
    String line = "";
```

```
    while((line = br.readLine()) != null){
```

```
        String[] info = line.split(" ");
```

```
        int cnt = 0;
```

```
        if (info[cnt].trim().equals(id)){
```

```
            JOptionPane.showMessageDialog(null,"중복된 아이디입니다!");
```

```
            return;
```

```
        }
```

```
        else {
```

```
            cnt++;
```

```
        }
```

```
        if (cnt == info.length - 1){
```

```
            cnt = 0;
```

```
        }
```

```
    }
```

```
} catch (FileNotFoundException ex) {
```

```
    Logger.getLogger(MainFrame.class.getName()).log(Level.SEVERE, null, ex);
```

```
} catch (IOException ex) {
```

```
    Logger.getLogger(MainFrame.class.getName()).log(Level.SEVERE, null, ex);
```

```
}
```

```
JOptionPane.showMessageDialog(null,"사용가능한 아이디입니다!");
```

```
btnSignin.setEnabled(true);
```

```
}
```

```
}
```