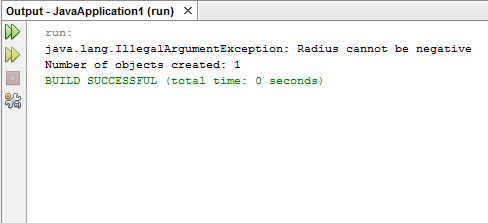
**ABDUL BASIT**

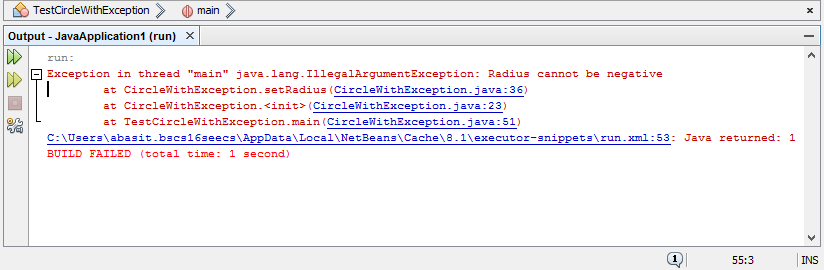
**193227**

**BSCS-6C**

**ACTIVITY#1**

* In the creation of firsts object there is no error and the first object created because radius is positive but when second object is created the argument which is passed having radius negative so at that point exception is thrown and the program stops working because we cannot handle it in such a way that to recover the input or continue its flow, and the number of objects created are only one because only one object is created when radius is positive.



* When we remove the clause **throws IllegalArgumentException from the setRadius method** the output is same because the Exception is of **uncheckedExceptions** type and it is not necessary to tell compiler about this type of exception.
* If we cannot handle the exception using try statement then the exception or error occur and the program terminates, and this output occurs.

**ACTIVITY#2**

* Yes, statement 4 and statement 5 will execute.
* Yes, Statement 4 and 5 occur after the exception and exception is used to stop the program from crashing and continue the code ahead.
* Yes, Statement 4 will execute because it is in finally, and statement 5 will not execute because code will transfer to the catch block of statements, and if catch isn’t used the program will crash.
* Yes, Statement 4 is in the block of finally will be executed but statement 5 will not be executed and program will crash.

**ACTIVITY#3**

/\*

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\* and open the template in the editor.

\*/

package javaapplication3;

import javax.swing.JOptionPane; // program uses JOptionPane

public class Addition

{

public static void main( String[] args )

{

// obtain user input from JOptionPane input dialogs

String firstNumber =

JOptionPane.showInputDialog( "Enter first integer" );

String secondNumber =

JOptionPane.showInputDialog( "Enter second integer" );

String thirdNumber=

JOptionPane.showInputDialog("Enter third integer");

// convert String inputs to int values for use in a

// calculation

int number1 = Integer.parseInt( firstNumber );

int number2 = Integer.parseInt( secondNumber );

int number3 = Integer.parseInt(thirdNumber);

int sum = number1 + number2+ number3; // add numbers

// display result in a JOptionPane message dialog

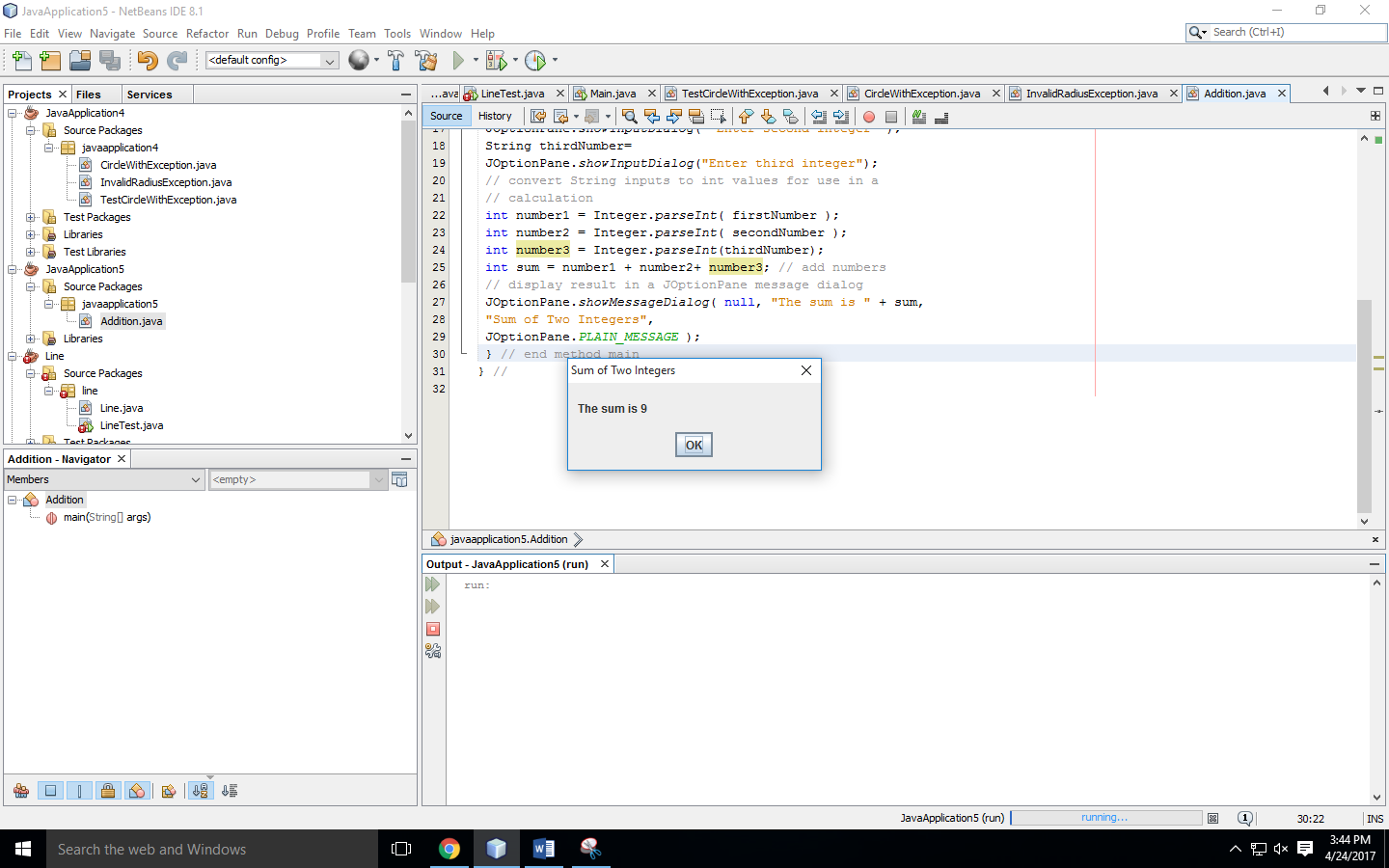
JOptionPane.showMessageDialog( null, "The sum is " + sum,

"Sum of Three Integers",

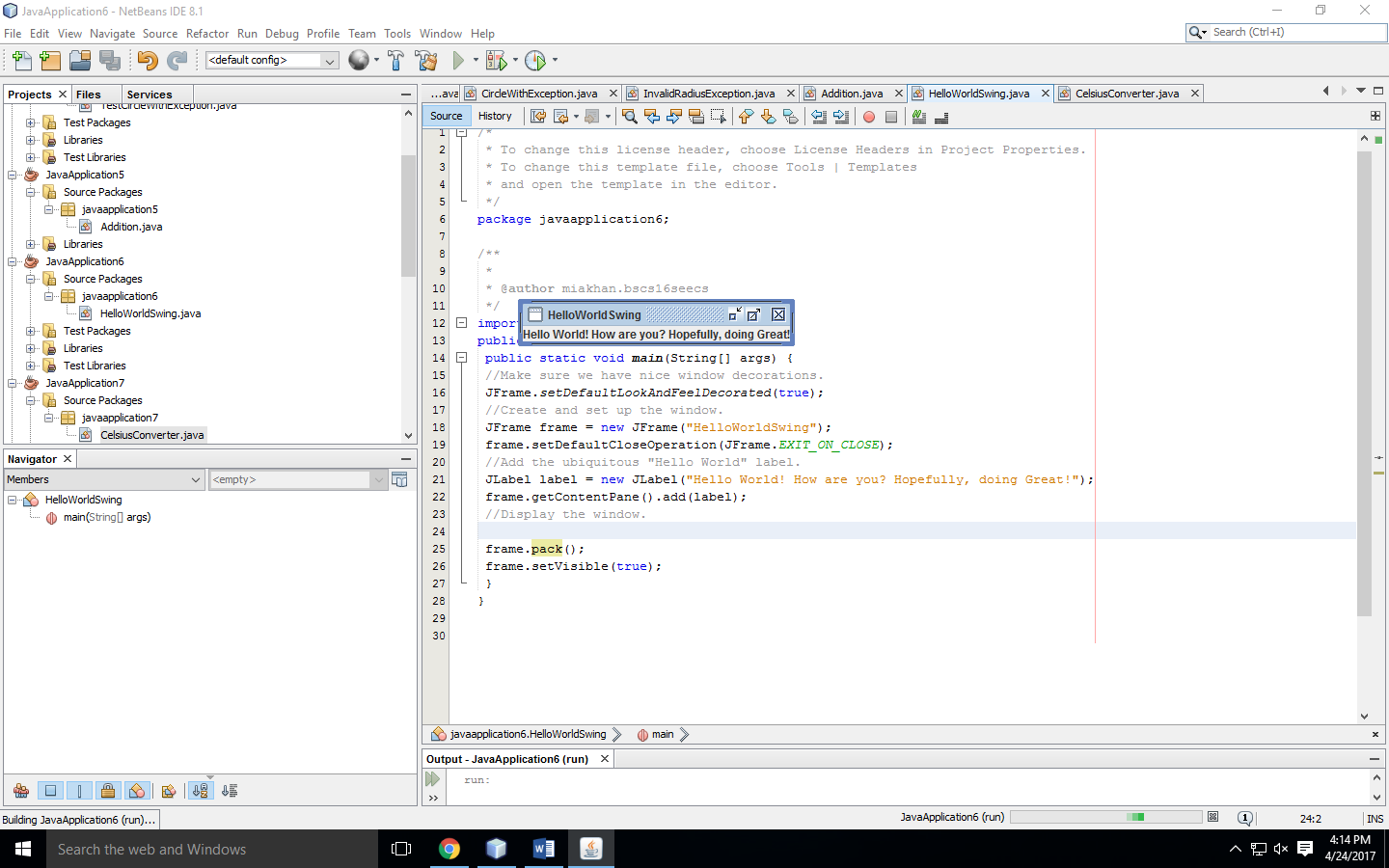
JOptionPane.PLAIN\_MESSAGE );

} // end method main

} //



# **ACTIVITY#4**



**TASK#1**

/\*

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\*/

package unitsconverter;

/\*\*

\*

\* @author Abdul Basit

\*/

import java.awt.\*;

import java.awt.event.\*;

import javax.swing.\*;

public class UnitsConverter implements ActionListener {

JFrame converterFrame;

JPanel converterPanel;

JTextField enteredNumber;

JLabel Jlabel1Conversion, conversionToJlabel;

JButton convertTemp;

JComboBox numberSequence;

public UnitsConverter() {

//Create and set up the window.

converterFrame = new JFrame("Convert between Different Quantities");

converterFrame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

converterFrame.setSize(new Dimension(400, 150));

//Create and set up the panel.

converterPanel = new JPanel(new GridLayout(3, 3));

String[] units = {"Celsius To Fahrenheit" , "Meters to Feet",

"Kilograms(Kgs) to Pounds(LBs)", "Radians to Degrees(Angles)"};

numberSequence = new JComboBox(units);

//Add the widgets.

addWidgets();

//Set the default button.

converterFrame.getRootPane().setDefaultButton(convertTemp);

//Add the panel to the window.

converterFrame.getContentPane().add(converterPanel, BorderLayout.CENTER);

//Display the window.

converterFrame.pack();

converterFrame.setVisible(true);

//Using the anonymous class to perform some action when individual items

//are selected in Drop Down List.

numberSequence.addItemListener(

new ItemListener(){

@Override

public void itemStateChanged(ItemEvent event){

if(event.getStateChange() == ItemEvent.SELECTED){

switch (numberSequence.getSelectedIndex()) {

case 0:

conversionToJlabel.setText(" Fahrenheit");

conversionToJlabel.setText("Celsius");

break;

case 1:

conversionToJlabel.setText(" Feet");

conversionToJlabel.setText("Meters");

break;

case 2:

conversionToJlabel.setText(" Pounds");

conversionToJlabel.setText("Kilograms(KGs)");

break;

default:

conversionToJlabel.setText(" Degrees");

conversionToJlabel.setText("Radians");

break;

}

}

}

}

);

}

/\*\*

\* Create and add the widgets.

\*/

private void addWidgets() {

//Create widgets.

enteredNumber = new JTextField(2);

conversionToJlabel = new JLabel("Celsius", SwingConstants.LEFT);

convertTemp = new JButton("Convert");

conversionToJlabel = new JLabel("Fahrenheit", SwingConstants.LEFT);

//Listen to events from the Convert button.

convertTemp.addActionListener(this);

//Add the widgets to the container.

converterPanel.add(enteredNumber);

converterPanel.add(conversionToJlabel);

converterPanel.add(convertTemp);

converterPanel.add(conversionToJlabel);

converterPanel.add(numberSequence);

conversionToJlabel.setBorder(BorderFactory.createEmptyBorder(9,9,9,9));

conversionToJlabel.setBorder(BorderFactory.createEmptyBorder(9,9,9,9));

}

@Override

public void actionPerformed(ActionEvent event) {

//Parse degrees Celsius as a double and convert to Fahrenheit.

//Performing specific functioning on specific items of Drop Down List

if(numberSequence.getSelectedIndex() == 0){

int tempFahr = (int)((Double.parseDouble(enteredNumber.getText())) \* 1.8 + 32);

conversionToJlabel.setText(tempFahr + " Fahrenheit");

}

if(numberSequence.getSelectedIndex() == 1){

double feet;

feet = Double.parseDouble((enteredNumber.getText())) \* 3.28;

conversionToJlabel.setText(feet + " feet");

}

if(numberSequence.getSelectedIndex() == 2){

double pounds = Double.parseDouble((enteredNumber.getText())) \* 2.204;

conversionToJlabel.setText(pounds + " pounds");

}

if(numberSequence.getSelectedIndex() == 3){

double degrees = Double.parseDouble((enteredNumber.getText())) \* 57.2958;

conversionToJlabel.setText(degrees + " Degrees");

}

}

public static void main(String[] args) {

//Make sure we have nice window decorations.

JFrame.setDefaultLookAndFeelDecorated(true);

UnitsConverter converter = new UnitsConverter();

}

}

