**Write a public static Java function that takes an arrayList of Doubles as its only input and returns the smallest value in the arrayList as a double. The function should work with any number of items in the arrayList. Properly indent and comment your function. You do not need to include error handling code.**

package al;

import java.util.ArrayList;

import java.util.Scanner;

**// @author Arun**

public class AL {

static Scanner sc = new Scanner(System.in);

static ArrayList<Double> array = new ArrayList<Double>();

/\*\*

\* @param args the command line arguments

\*/

public static void main(String[] args) {

System.out.println("Please enter an array of numbers and type 0 (ZERO) when finished");

System.out.println();

double inVal = sc.nextDouble();

while (inVal != 0)

{

array.add(inVal);

inVal = sc.nextDouble();

}

System.out.println("--------------------");

double small = Integer.MAX\_VALUE;

int i =0;

for (double j: array){

if (j < small) {

small = j;

i++;

}

}

System.out.println("The smallest value is "+small+" in the ArrayList");

}

}

**Beginning with the following line of Java code:**

**RandomAccessFile file = new RandomAccessFile("fileDoesNotExist.dat", "r");**

**Add a try - catch block that catches the exception that will be generated when the file is not found on disk. The code should display a message with exception information to the user.**

boolean validFileName = false;

while (!validFileName)

{

try

{

file = new RandomAccessFile(“fileDoesNotExist.dat “, “r”);

validFileName = true;

}

catch(FileNotFoundException e){

System.out.println(“File not found”);

}

}

**Beginning with the following Java code**

**class myPanel extends JPanel implements ActionListener**

**{**

**private JButton myButton;**

**public myPanel**

**{**

**myButton = new JButton("Launch Rocket");**

**}**

**}**

**Write the remainder of the code to respond to a click on myButton. When myButton is clicked, the code should change the button text to "Launched".**

class myPanel extends JPanel implements ActionListener

{

private JButton myButton;

public myPanel

{

myButton = new JButton("Launch Rocket");

myButton.addActionListener(this);

this.add(myButton);

}

public void actionPerformed(ActionEvent e)

{

Object source = e.getSource();

if (source == myButton)

myButton.setText("Launched");

}

}

**You have a Java Swing application. Write a line of Java code that you can place in the constructor of the class that extends JFrame that will cause the application to exit when the user closes the main window.**

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

**Write a Java function that accepts two String parameters: (1) the name of a text file, and (2) a String to write to the file. The Java function should check to see if the file denoted by the first parameter exists and create it if it does not exist. Then the function should append the string denoted by the second parameter (2) to the file, in its own line, and then close the file. Use try-catch and display a message to the console if there is an error. The function should return true if successful and false if not. You do not need to show the import statements.**

**An example of Java code that calls the function:**

**boolean stringWritten = writeString("TestFile.txt", "Append this string");**

package writetofile;

**// author -Arun**

import java.io.File;

import java.io.FileOutputStream;

public class WriteToFile {

public static void main(String[] args)

{

stringWritten(); // main calling stringWritten

}

private static boolean stringWritten()

{ //string written method calling writeString with arguments in try catch block

try

{

writeString("TESTFILE.txt","APPEND THIS STRING");

}

catch(Exception e)

{

e.printStackTrace();

return false;

}

return true;

}

private static void writeString(String newFile, String newContent)

{ //writeString function with two string parameters

File file = new File(newFile);

try

{

FileOutputStream fos = new FileOutputStream(file);

fos.write(newContent.getBytes());

System.out.println("String \*\*\* "+newContent+" \*\*\* has been written to file \*\*\* "+file.getName()+" \*\*\*");

}

catch(Exception e)

{

e.printStackTrace();

}

}

}

**Write a SQL SELECT statement that returns the FirstName, LastName, and City fields from a database table called Friends. The results should be sorted by order of LastName from Z to A (descending order).**

SELECT FirstName, LastName, City from Friends ORDER BY LastName DESC;