ITM 311 Exercise 1a Using Eclipse

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1. Download Eclipse, Nero Edition
2. Open the file Running Eclipse which is located in the MISC FILES on IDEs folder
3. Follow the directions in that file.
4. For your convenience, here is a copy of the code to execute for testing:

import java.text.DecimalFormat;

import javax.swing.JOptionPane;

public class JavaNotes

{

//Here is that math problem written in the Java language.

public static void main(String args[])

{

DecimalFormat twoPlace = new DecimalFormat("0.00");

//First, knowing that the area of a circle is

double A = 62.80, r = 0, C = 0;

//compute the radius r

r = Math.sqrt(A / 3.1416);

//compute the circumference C

C = 2 \* 3.1416 \* r;

//display the circumference

JOptionPane.showMessageDialog(null, "the circumference: " + twoPlace.format(C), "Result", JOptionPane.PLAIN\_MESSAGE);

}

}

1. Click on the RUN icon, and observe the results, as per the Running Eclipse file instructions.
2. Take a snapshot of the results (use a snipping tool) and place it below for credit.



1. Now, go back to the code and insert comment statements where appropriate [Hint: place before variable declarations; processing statements and output statement(s)].
2. Modify the code to
   1. Place your name and date above the import statement as comment statements (part of documentation);
   2. Include the calculation for the surface area of a sphere with the same radius as determined by the program [note: the formula to calculate the surface area of a sphere is A=4πr2.
3. Place your modified code below:

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//ITM 311 - 01 08/28/2016

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import javax.swing.JOptionPane;

public class JavaNotes

{

//Here is that math problem written in the Java language.

public static void main(String args[])

{

DecimalFormat twoPlace = new DecimalFormat("0.00");

//First, knowing that the area of a circle is

double A = 62.80, r = 0, C = 0, S =0;

//compute the radius r

r = Math.sqrt(A / 3.1416);

//compute the circumference C

C = 2 \* 3.1416 \* r;

//compute the Area S

S = 4 \* 3.1416 \* Math.sqrt(r) ;

//display the circumference

JOptionPane.showMessageDialog(null, "the circumference: " + twoPlace.format(C)

+ "\n the surface area: " + twoPlace.format(S) ,

"Result", JOptionPane.PLAIN\_MESSAGE);

}

}

1. Place a snapshot showing the circumference and the surface area below: