

# Theater Revenue

## Basic Steps in Creating your Program.

1. Plan your logic before working on the project and review the syntax you will use in the project. Think about how you want the output to display to the user. You might want to tell the user what the program does and what type of input you expect from the user. Your interface structure could do this. Select names of the variables you will use in the program.
2. Create a JAVA project Using **NetBeans IDE**.
  - Declare variables to hold input information.
  - Using the **JFrame Form** or **JPanel Form** to create the application.
  - Program created with JavaFX in the previous versions of NetBeans like 8.2 will work but the newest version of Apache NetBeans 12.6 does not automatically allow creation of JavaFX applications. There are a number of additions to the runtime that need to be set up and are not easily accomplished. The notation in 12.6 is that you use the Ant>Project and then add the JFrame to the project source. From there use the Panels to add the forms and controls.
3. Run the program. Debug the code, making sure all calculations are correct and the line spacing is suitable for readability.

## Your program Assignment

A movie theater only keeps a percentage of the revenue earned from ticket sales. The remainder goes to the movie company. Create an application that calculates and displays the following figures for one night's box office business at a theater:

Create a GUI application that allows the user to enter the following data into text fields:

- Price per adult ticket
- Number of adult tickets sold
- Price per child ticket
- Number of child tickets sold

The application should calculate and display the following data for one night's box office business at the theater:

- Gross revenue for adult tickets sold. This is the amount of money taken in for all adult tickets sold

- Net revenue for adult tickets sold. This is the amount of money from adult ticket sales left over after the payment to the movie company has been deducted.
- Gross revenue for child tickets sold. This is the amount of money taken in for all child tickets sold.
- Net revenue for child tickets sold. This is the amount of money from child tickets sales left over after the payment to the movie company has been deducted.
- Total gross revenue. This is the sum of gross revenue for all adult and child tickets sold.
- Total net revenue. This is the sum of net revenue for adult and child tickets sold.

Assume the theater keeps 20% of the box office receipts. Use a named constant in your code to represent this percentage.

Use the following set of test data to determine whether the application is calculating properly.

<b>Ticket Sales</b>	<b>Revenue</b>
Price per Adult Ticket: \$6.00 Adult Tickets Sold: 120 Price per Child Ticket: \$4.00 Child Tickets Sold: 72	Gross Adult Ticket Sales: \$720.00 Gross Child Ticket Sales: \$288.00 Total Gross Revenue: \$1,008.00 Net Adult Ticket Sales: \$144.00 Net Child Ticket Sales: \$57.60 Total Net Revenue: \$201.60

### **Sample using Frame**

A version of this can be done using the Frame.

Theater Revenue - David Palermo

Price per child ticket:  Number of children's tickets sold:

Price per adult ticket:  Number of adult tickets sold:

Gross revenue for adult tickets sold: \$840.00  
Net revenue for adult tickets: \$168.00  
Gross revenue for child tickets sold: \$288.00  
Net revenue for child tickets sold: \$57.60  
Total gross revenue: \$1,128.00  
Total net revenue: \$225.60