

CT874

Assignment 1

H.Dip. Industry Stream

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Question 1

Code:

```
/*
 * Name: Tori Hume
 * ID: 11486248
 * Assignment 1 part 1
 */

import java.util.Scanner; //import the scanner method
import java.text.DecimalFormat; //imports the decimal method

public class TicketSales { //began class

    public static void main(String[] args) { //create method

        //Declare Number of tickets sold for seats in each section, (A,B,C)
        int aSeats, bSeats, cSeats;
        //Declare price of tickets in each section (A,B,C) and total sales
        double aPrice, bPrice, cPrice, totalSales;

        Scanner input = new Scanner(System.in);
        DecimalFormat df = new DecimalFormat("€0.00");

        System.out.print("Please enter number of A seats sold: (Press enter
when done)");
        //Prints stuff in brackets to screen, "" means print exactly does
not call on variables.
        aSeats = input.nextInt(); //assignes next input to aSeats of type
int
        System.out.print("Please enter price of A seats: (Press enter when
done)");
        aPrice = input.nextDouble();//assignes next input to aPrice of type
Double

        System.out.print("Please enter number of B seats sold: (Press enter
when done)");
        bSeats = input.nextInt();//assignes next input to bSeats of type
int
        System.out.print("Please enter price of B seats: (Press enter when
done)");
        bPrice = input.nextDouble();//assignes next input to bPrice of type
Double

        System.out.print("Please enter number of C seats sold: (Press enter
when done)");
        cSeats = input.nextInt();//assignes next input to cSeats of type
int
        System.out.print("Please enter price of C seats: (Press enter when
done)");
        cPrice = input.nextDouble();//assignes next input to cPrice of type
Double
```

```

        //Calculate Total Sales
        totalSales= ((aSeats*aPrice) + (bSeats*bPrice) + (cSeats*cPrice));

        //Print table to the screen. using df.format to insure price
        displayed as €0.00
        System.out.println("\n \t \t Tickets Sold \t Price per Ticket");
        System.out.println("\t \t----- \t -----");
        System.out.println(" A Tickets: \t \t" + aSeats + "\t \t" +
df.format(aPrice));
        System.out.println(" B Tickets: \t \t" + bSeats + "\t \t" +
df.format(bPrice));
        System.out.println(" C Tickets: \t \t" + cSeats + "\t \t" +
df.format(cPrice));
        System.out.println("\t Total Sales \t" + df.format(totalSales));

        input.close(); //Close Scanner

    } // Close Method

} // Close Class

```

Screen Shot:

The screenshot shows the Eclipse IDE with the following components:

- Editor:** Displays the `TicketSales.java` file. The code includes comments and logic for calculating total sales based on three types of tickets (A, B, C) and their prices. The code uses `System.out` for printing and `df.format` for formatting prices to two decimal places.
- Console:** Shows the output of the program. It displays prompts for the number of seats and price per seat for each ticket type, followed by the calculated total sales. The output is as follows:


```

<terminated> TicketSales [Java Application] C:\Program Files\Java\jre1.8.0_102\bin\javaw.exe (21 Sep 2016, 18:48:49)
Please enter number of A seats sold: (Press enter when done)120
Please enter price of A seats: (Press enter when done)12.5
Please enter number of B seats sold: (Press enter when done)200
Please enter price of B seats: (Press enter when done)10.99
Please enter number of C seats sold: (Press enter when done)225
Please enter price of C seats: (Press enter when done)8.99

      Tickets Sold      Price per Ticket
      -----
A Tickets:           120             €12.50
B Tickets:           200             €10.99
C Tickets:           225             €8.99
      Total Sales      €5720.75
      
```
- Project Explorer:** Shows the project structure, including the `src` folder and the `TicketSales.java` file.
- Run and Debug Console:** Shows the status of the program execution, indicating it was terminated.

Question 2

Code:

```
/*
 * Name: Tori Hume
 * ID: 11486248
 * Assignment 1 part 2
 */

public class BeerSong { //Begin Class

    public static void main(String[] args) { //Create Main Method.

        String word="bottles"; // Declare word

        for (int beerNum=99; beerNum>0; beerNum-- ){ //open for loop

            if (beerNum<=98){ //if loop to act provided beerNum is equal
to or less than 98
                System.out.println((beerNum) + " " + word + " of beer
on the wall.\n" );
            }

            System.out.println(beerNum + " " + word + " of beer on the wall.");
            System.out.println(beerNum+ " " + word + " of beer.");
            System.out.println("Take one down.");
            System.out.println("Pass it around.");

            if (beerNum==2) {
                beerNum=1;
                word="bottle";// singular
                System.out.println((beerNum) + " " + word + " of beer on the
wall.\n" );
                System.out.println(beerNum + " " + word + " of beer on the
wall.");
                System.out.println(beerNum+ " " + word + " of beer.");
                System.out.println("Take one down.");
                System.out.println("Pass it around.");}
        }

        System.out.println("No more bottles of beer on the wall");
        //outside for loop. only prints if beerNum=0 and program exits for loop

    } //Close Method

} //close Class
```

Screen Shot:

