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QESTION-1

```
//Student Name: Tianle Shu
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package nuig.question1;

import java.text.DecimalFormat;
import java.util.Scanner;

public class ConcertImprove {

   // Declare the totalSale(totally price which is sailed )
   private static double totalSales = 0;
   // and typeNum(the number of the ticket's type)
   // I set equals to 3
   private static int typeNum = 3;

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

      // Set an array of type double -
      // and the length equals to typeNum (3)
      Double[] ticketPrice = new Double[typeNum];

      // Set an array of
      Integer[] seatNum = new Integer[typeNum];

      // Set an array of ticket names
      char[] name = new char[typeNum];
      //for loop
      for (int i = 0; i < typeNum; i++) {
         // Let the type of name begin with A
         name[i] = (char) ('A' + i);
      }//end for loop

      // Access scanner method
      @SuppressWarnings("resource")
      Scanner input = new Scanner(System.in);
```

```
      // Create a loop for collecting ticket's information
      //for loop
      for (int i = 0; i < typeNum; i++) {
         System.out.print("Enter number of " + name[i] + "
seats sold: ");
         seatNum[i] = input.nextInt();
         System.out.print("Enter price of " + name[i] + "
tickets: ");
         ticketPrice[i] = input.nextDouble();
      }//end for loop

      // Define DecimalFormat,
      // Reference:
      //
https://docs.oracle.com/javase/7/docs/api/java/text/Decim
alFormat.html
      DecimalFormat df = new DecimalFormat("0.00");
      // output the resulet(ticket informations and the
price)
      System.out.println("\n \t \t Tickets Sold \t Price
per Ticket");
      System.out.println("\t \t ------------ \t ----------
------");

      // Use for loop to print out the tickets price and
numbre of sales.
      //for loop
      for (int i = 0; i < typeNum; i++) {
         System.out.println(name[i] + " Ticket:\t \t" +
seatNum[i] + "\t \t" + ticketPrice[i]);
         // Calculator total price of the sailed tickets .
         totalSales   =   totalSales   +   seatNum[i]   *
ticketPrice[i];
      }//end for loop

      // output the result for totally price.and let the
result(total) Take one
      // integer and two decimal places
      System.out.println("\n  \t  \t  Total  Sales  € "  +
df.format(totalSales));
   }// end main method
}//end class
```

QESTION-2

```
//Student Name: Tianle Shu
//Student Id: 19232619
//Lecturer: Seamus Hill
package nuig.question2;

public class BeerSong {
   public static void main(String[] args) {

      //Declare word type is String, and value is bottles
      String word = "bottles";

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

         //once beerNum == 1 , and then word's value is bottle
         if(beerNum == 1) {
            word = "bottle";
         }

         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.");

         /** eg. --i first calculate then assigned
          *     i-- first assigned then calculate
          */
         if(--beerNum > 0) {

            if(beerNum == 1) {
               word = "bottle";
               System.out.println(beerNum + " " + word + " of
beer on the wall");
            }
```

```
            else {
               System.out.println(beerNum + " " + word + " of
beer on the wall");
            }

         }
         else {
            System.out.println("No more bottles of beer on the
wall");
         }
      } // end for loop
   } // end main method
} // end class
```