/\*\* =======================================================================

\* Class:Main ExT.T Pg.n/a Author: Yin Linhai

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\* A program that assigns a random number of sales to sales people, and using pre-defined prices calculates, and

\* prints the amount sold, and value sold for each car, and salesperson, as well as print the top value sold per person,

\* top value sold per car, and highest number of cars sold.

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\* Course:Computer Science 201Teacher:Mr Blakey

\* School:Sir Winston Churchill High School, Calgary, Alberta, Canada

\* Language: Java SE 7.0Target Operating System: Java Virtual Machine

\* System:Intel Celeron 3GHz running under Windows 7 IDE: Eclipse 4.2

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**package** test\_6;

**import** java.util.Random;

**public** **class** Main {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

//initialize variables

Random sale = **new** Random();

**double** topSalesP = 0, topValueC = 0;

**int** topVolume = 0;

**int** topCarS=0,topCarV=0,topPerson=0;

**int**[][] sales = **new** **int**[4][5];

**double** price[] = {10288.00, 1299.99, 18456.00, 20345.00, 45799.00};

//print out table top

System.*out*.println("\t\tModel 1\tModel 2\tModel 3\tModel 4\tModel 5");

**for**(**int** x=0; x<4; x++) {

//print out table sidebar

System.*out*.print("SalesPerson" + (x+1) + "\t");

**for**(**int** y=0; y<5; y++) {

//randomly fill and print sales of cars max 20

sales[x][y] = sale.nextInt(20);

System.*out*.print(sales[x][y] + "\t");

}

//to look good

System.*out*.print("\n");

}

//print out title

System.*out*.println("\nTotal Sales and Value by SalesPerson:");

//Salesperson loop

**for**(**int** y=0; y<4; y++) {

//values made for loop

**double** valueSold = 0;

**int** carsSold = 0;

//calculate total value of all cars sold, and amount

**for**(**int** x=0; x<5; x++) {

valueSold += sales[y][x] \* price[y];

carsSold += sales[y][x];

}

//decide who made the most

**if**(valueSold>topSalesP) {

topSalesP = valueSold;

topPerson = y+1;

}

//print out data

System.*out*.println("SalesPerson " + (y+1) + "\t\t" + carsSold + " $" + valueSold);

}

//title for car Model

System.*out*.println("\nTotal Sales by Model:");

//Car Model loop

**for**(**int** x=0; x<5; x++) {

//variables

**double** valueSold = 0;

**int** carsSold = 0;

//loop to calculate number of cars sold, and the money made from each model

**for**(**int** y=0; y<4; y++) {

valueSold += sales[y][x] \* price[x];

carsSold += sales[y][x];

}

//decisions to decide top

**if**(valueSold>topValueC) {

topCarS = x+1;

topValueC=valueSold;

}

**if**(carsSold>topVolume) {

topCarV = x+1;

topVolume=carsSold;

}

//Print out stuff

System.*out*.println("Model: " + (x+1) + "\t\t" + carsSold + " $" + valueSold);

}

//print out top of all categories

System.*out*.println("\nSalesman: " + topPerson + " has the highest sales of: $" + topSalesP);

System.*out*.println("Model: " + topCarS + " has the highest value sales of: $" + topValueC);

System.*out*.println("Model: " + topCarV + " has the highest volume of sales: " + topVolume);

}

}

**Output:**

Model 1 Model 2 Model 3 Model 4 Model 5

SalesPerson1 3 7 6 12 15

SalesPerson2 2 1 8 4 11

SalesPerson3 0 19 10 4 5

SalesPerson4 8 10 18 18 10

Total Sales and Value by SalesPerson:

SalesPerson 1 43 $442384.0

SalesPerson 2 26 $33799.74

SalesPerson 3 38 $701328.0

SalesPerson 4 64 $1302080.0

Total Sales by Model:

Model: 1 13 $133744.0

Model: 2 37 $48099.630000000005

Model: 3 42 $775152.0

Model: 4 38 $773110.0

Model: 5 41 $1877759.0

Salesman: 4 has the highest sales of: $1302080.0

Model: 5 has the highest value sales of: $1877759.0

Model: 3 has the highest volume of sales: 42