SQL FINAL PROJECT

Business Problem: Rank the top three sales representatives based on the total revenue generated from customer orders.

Code:

```sql
SELECT E.firstName, e.lastName,
SUM(OD.quantityOrdered * OD.priceEach) AS totalRevenue
FROM employees as E
JOIN customers as C
ON E.employeeNumber = C.salesRepEmployeeNumber
JOIN Orders as O
ON C.customerNumber = O.customerNumber
JOIN OrderDetails AS OD
ON O.orderNumber = OD.orderNumber
GROUP BY E.employeeNumber
ORDER BY totalRevenue desc LIMIT 3;
```

Output:

firstName	lastName	totalRevenue
Gerard	Hernandez	1258577.81
Leslie	Jennings	1081530.54
Pamela	Castillo	868220.55

Business Problem: Identify which product lines have the highest average profit per unit sold.

Code:

```
SELECT PL.productLine, AVG(OD.priceEach — P.buyPrice) AS avgProfitperProduct
FROM ProductLines AS PL
JOIN Products AS P
ON PL.productLine = P.productLine
JOIN OrderDetails AS OD
ON P.productCode = OD.productCode
GROUP BY PL.productLine
ORDER BY avgProfitperProduct desc;
```

Output:

productLine	avgProfitperProd...	
Classic Cars	42.732574	
Motorcycles	36.473370	
Trucks and Buses	36.380162	
Vintage Cars	32.338402	
Ships	30.754776	
Planes	30.698036	
Trains	23.217160	

Business Problem: Identify customers with high-value orders that are more than two years old and have not made any subsequent purchases.

Code:

```sql
SELECT C.customerName, C.contactFirstName, C.contactLastName, C.phone
FROM Customers as C
WHERE C.customerNumber IN (
SELECT customerNumber
FROM Payments
WHERE amount > 50000
) AND C.customerNumber NOT IN (
SELECT customerNumber
FROM Orders
WHERE orderDate >= DATE_SUB(curdate(), INTERVAL 2 YEAR)
);
```

Output:

customerName	contactFirstNa...	contactLastNa...	phone
Australian Collectors, Co.	Peter	Ferguson	03 9520 4555
Baane Mini Imports	Jonas	Bergulfsen	07-98 9555
Mini Gifts Distributors Ltd.	Susan	Nelson	4155551450
Land of Toys Inc.	Kwai	Lee	2125557818
Euro+ Shopping Channel	Diego	Freyre	(91) 555 94 44
Danish Wholesale Imports	Jytte	Petersen	31 12 3555
Dragon Souveniers, Ltd.	Eric	Natividad	+65 221 7555
Muscle Machine Inc	Jeff	Young	2125557413
Diecast Classics Inc.	Kelvin	Leong	2155551555
Technics Stores Inc.	Juri	Hashimoto	6505556809
Herkku Gifts	Veysel	Oeztan	+47 2267 3215
La Corne D'abondance,...	Marie	Bertrand	(1) 42.34.2555
AV Stores, Co.	Rachel	Ashworth	(171) 555-1555
Online Mini Collectables	Miguel	Barajas	6175557555
Toys4GrownUps.com	Julie	Young	6265557265
Heintze Collectables	Palle	Ibsen	86 21 3555
Collectable Mini Designs...	Valarie	Thompson	7605558146
Auto Associés & Cie.	Daniel	Tonini	30.59.8555
Toms Spezialitäten, Ltd	Henriette	Pfalzheim	0221-5554327
Rovelli Gifts	Giovanni	Rovelli	035-640555
Vida Sport, Ltd	Mihael	Holz	0897-034555
Mini Creations Ltd.	Wing	Huang	5085559555
Corporate Gift Ideas Co.	Julie	Brown	6505551386
Down Under Souveniers,...	Mike	Graham	+64 9 312 5555
Marseille Mini Autos	Laurence	Lebihan	91.24.4555
Online Diecast Creations...	Dorothy	Young	6035558647
Cruz & Sons Co.	Arnold	Cruz	+63 2 555 3587
L'ordine Souveniers	Maurizio	Moroni	0522-556555
The Sharp Gifts Wareho...	Sue	Frick	4085553659
Corrida Auto Replicas, Ltd	Martín	Sommer	(91) 555 22 82
Diecast Collectables	Valarie	Franco	6175552555
Kelly's Gift Shop	Tony	Snowden	+64 9 5555500