Higher Computing Science

Database Implementation: Computed Fields and Aliases

Exercise 6 – Answers

Task 1

1.
```
SELECT title, hotelName, kilometresFromAirport,
kilometresFromAirport-2.8 AS [Updated Distance]
FROM Hotel, Holiday
WHERE Hotel.hotelRef=Holiday.hotelRef
AND city="Madrid";
```

title	hotelName	kilometresFromAirport	Updated Distance
Glorious Spain	Hotel Tranquilo	15.6	12.8
Madrid Attractions	Hotel Tranquilo	15.6	12.8
Madrid City Break	Hotel Tranquilo	15.6	12.8
Spanish Siesta	Hotel Tranquilo	15.6	12.8
Capital Spain	Empera	14.1	11.3
Madrid Summer Madness	Empera	14.1	11.3

2.
```
SELECT hotelName, pricePerNight, pricePerNight+7.25 AS [Tax
Inclusive Price], round([Tax Inclusive Price] * 1.13,2) AS
[Tax Inclusive Price in Euros]
FROM Hotel, Holiday
WHERE Hotel.hotelRef=Holiday.hotelRef
AND city="Rome"
ORDER BY pricePerNight+7.25 DESC;
```

hotelName	pricePerNight	Tax Inclusive Price	Tax Inclusive Price in Euros
Hotel Vicori	£85.00	92.25	104.24
Hotel Sereno	£82.00	89.25	100.85
Hotel Sereno	£82.00	89.25	100.85
Hotel Fario	£80.00	87.25	98.59
Hotel Geno	£78.00	85.25	96.33
Darios	£65.00	72.25	81.64
Hotel Evoli	£64.00	71.25	80.51
Avanti	£45.00	52.25	59.04

3.
```
SELECT title, hotelName, nights AS [Original Duration],
pricePerNight AS [Original Price], nights+1 AS [Updated
Duration], pricePerNight*1.1 AS [Updated Price per Night]
FROM Holiday, Hotel
WHERE Holiday.hotelRef=Hotel.hotelRef
AND title LIKE "*budget*";
```

title	hotelName	Original Duration	Original Price	Updated Duration	Updated Price per Night
Budget Dublin	Dublin Apartments	2	£29.00	3	31.9
Catalonia on a budget	Barce Bunkhouse	3	£25.00	4	27.5
London on a budget	Sleepy Inn	3	£39.00	4	42.9
Paris on a budget	Napolean Ville	3	£48.00	4	52.8
Portugal on a budget	Lado Colina	2	£55.00	3	60.5

4.
```
SELECT title, country, hotelName, nights, pricePerNight,
pricePerNight*nights AS [Total Cost]
FROM Holiday, Hotel
WHERE Holiday.hotelRef=Hotel.hotelRef
AND country="Spain"
ORDER BY pricePerNight*nights DESC, title ASC;
```

title	country	hotelName	nights	pricePerNight	Total Cost
Glorious Spain	Spain	Hotel Tranquilo	5	£95.00	475
Madrid Attractions	Spain	Hotel Tranquilo	5	£95.00	475
Spanish Beach	Spain	Villa Grande	5	£95.00	475
Spanish Siesta	Spain	Hotel Tranquilo	5	£95.00	475
Spanish Sun	Spain	Villa Grande	5	£95.00	475
Madrid Summer Madness	Spain	Empera	7	£62.00	434
Spanish Luxury	Spain	Casa Luxor	3	£100.00	300
Madrid City Break	Spain	Hotel Tranquilo	2	£95.00	190
Capital Spain	Spain	Empera	3	£62.00	186
Catalonia Caper	Spain	Catalonia Inn	3	£40.00	120
Catalonia Crystal	Spain	Catalonia Inn	3	£40.00	120
Barcelona Pricebuster	Spain	Barce Bunkhouse	3	£25.00	75
Catalonia on a budget	Spain	Barce Bunkhouse	3	£25.00	75

5.
```
SELECT title, hotelName, country, city, starRating,
pricePerNight*nights AS[Total Cost]
FROM Holiday, Hotel
WHERE Holiday.hotelRef=Hotel.hotelRef
AND starRating>=4
AND pricePerNight*nights <200;
```

title	hotelName	country	city	starRating	Total Cost
Madrid City Break	Hotel Tranquilo	Spain	Madrid	5	190
Edinburgh City Break	Castle View	Scotland	Edinburgh	4	130

Task 2

1.
```
SELECT CustomerOrder.orderNumber, name, quantity, price,
(quantity*price) AS Cost
FROM CustomerOrder, OrderProduct, Product
WHERE CustomerOrder.orderNumber=OrderProduct.orderNumber
AND OrderProduct.productID=Product.productID
AND CustomerOrder.orderNumber=20007;
```

orderNumber	name	quantity	price	Cost
20007	18 inch teddy bear	50	£11.99	599.5
20007	Fish bean bag toy	100	£3.49	349
20007	Bird bean bag toy	100	£3.49	349
20007	Rabbit bean bag toy	100	£3.49	349
20007	Raggedy Ann	50	£4.99	249.5

2.
```
SELECT Supplier.name, Product.name, price, round(price*0.9,2)
AS [Discounted Price]
FROM Supplier, Product
WHERE Supplier.supplierID=Product.supplierID
AND Supplier.name="Fun and Games";
```

Supplier.name	Product.name	price	Discounted Price
Fun and Games	King doll	£9.49	8.54
Fun and Games	Queen doll	£9.49	8.54

3.
```
SELECT CustomerOrder.orderNumber,name,  Product.productID,
quantity, quantity+20 AS [Increased Quantity]
FROM CustomerOrder, OrderProduct, Product
WHERE CustomerOrder.orderNumber=OrderProduct.orderNumber
AND OrderProduct.productID=Product.productID
AND CustomerOrder.orderNumber=20007
AND name LIKE "*bean bag*";
```

orderNumber	name	productID	quantity	Increased Quantity
20007	Fish bean bag toy	BNBG01	100	120
20007	Bird bean bag toy	BNBG02	100	120
20007	Rabbit bean bag toy	BNBG03	100	120

4.
```
SELECT shopName, contactName, quantity, price, description,
quantity+25 AS [Updated Quantity]
FROM Customer, CustomerOrder, OrderProduct, Product
WHERE Customer.customerID=CustomerOrder.customerID
AND CustomerOrder.orderNumber=OrderProduct.orderNumber
AND OrderProduct.productID=Product.productID
AND shopName="The Toy Store"
AND description like "*bean bag*";
```

shopName	contactName	quantity	price	description	Updated Quantity
The Toy Store	Kim Howard	10	£3.49	Fish bean bag toy, complete with bean bag worms with which to feed it	35
The Toy Store	Kim Howard	10	£3.49	Bird bean bag toy, eggs are not included	35
The Toy Store	Kim Howard	10	£3.49	Rabbit bean bag toy, comes with bean bag carrots	35