

Course Assignment

For the course: **Developing Queries with Microsoft SQL Server**

Business Requirements

Question 1

Retrieve information about the products with colours that are not null and not silver nor black nor white and list price is between £75 and £750. Rename the column StandardCost as Price. Finally please sort the results by list price in descending order.

Question 2

Find all the male employees born between 1962 to 1970 and with hire date greater than 2001 and female employees born between 1972 and 1975 and hire date between 2001 and 2002.

Question 3

Create a list of 10 most expensive products that have a product number beginning with 'BK'. Include only the product ID, Name and colour.

Question 4

First create a list of all the contact people where the first 4 characters of their last name are equal to the first 4 characters of their email address.

Second find all the contact people whose first name and the last name begin with the same character, create a new column called full name combining their first name and their last name. Finally add a column with the length of the full name.

Question 5

Return all product subcategories that take an average of 3 days or longer to manufacture.

Question 6

Create a price segmentation for products by defining a criteria that places each item in a segment as follows: If price is less than £200 then it's low value. If price is between £201 and £750 then it is mid value. If price is between £751 and £1250 then it is mid to high value. All else is higher value. Filter the results only for products that are black, silver and red (colour).

Question 7

How many distinct job titles are there in the Employee table.

Question 8

Use the Employee table and calculate the ages of each employee at the time of hiring.

Question 9

How many employees will be due a Long Service Award in the next 5 years, if long service is 20 years?

Question 10

How many more years does each employee have to work before reaching retirement, if the retirement age is 65?

Question 11

Implement a new pricing policy on the product table based on the colour of the item

Create a column called Newprice with the following values: If the colour is white please increase the price by 8%, If yellow reduce the price by 7.5%, If black increase the price by 17.2%.

If multi, silver, silver/black or blue take the square root of the price and double that value.

For each item, calculate a commission of 37.5% of new prices.

Question 12

Print the information about all the Sales.Person and their sales quota. For every Sales person you should provide their FirstName, LastName, HireDate, SickLeaveHours and Region where they work.

Question 13

Using adventure works, write a query to extract the following information.

- Product name
- Product category name
- Product subcategory name
- Sales person
- Revenue
- Month of transaction
- Quarter of transaction
- Region

Question 14

Display the information about the details of an order i.e. order number, order date, amount of order, which customer gives the order and which salesman works for that customer and how much commission he gets for an order.

Question 15

For all the products calculate

- Commission as 14.790% of standard cost,
- Margin, if standard cost is increased or decreased as follows:
 - Black: +22%,
 - Red: -12%
 - Silver: +15%
 - Multi: +5%
 - White: Two times original cost divided by the square root of cost
 - For other colors, standard cost remains the same

Question 16

Create a view to find out the top 5 most expensive products for each colour.



Submission Instructions

1. Email address for submission:

- To: trainingsupport@pairview.co.uk
Cc: admin@pairview.co.uk

2. Assignment deadline

- Please refer to the email to which this document was attached.

3. Pairview Training Support contact details:

- To: trainingsupport@pairview.co.uk
Cc: admin@pairview.co.uk
- Please email us your query/problem first. Please attach a screenshot of what happened if it is regarding a technical issue. This helps us diagnose the cause of your problems to advise you more quickly and efficiently. We will try our best to respond to you within 24 hours of receiving your email.
- Available from Monday to Friday, from 9am to 5pm

We wish you all the best with your learning and career development.