

**Course Assignment / Project**

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

# Business Requirements

## Question 1

Retrieve information about the products with colour values except null, red, silver/black, white and list price between £75 and £750. Rename the column StandardCost to Price. Also, sort the results in descending order by list price.

## 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

Create a list of all contact persons, where the first 4 characters of the last name are the same as the first four characters of the email address. Also, for all contacts whose first name and the last name begin with the same characters, create a new column called full name combining first name and the last name only. Also provide the length of the new column full name.

**Question 5**

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

## Question 6

Create a list of product segmentation by defining criteria that places each item in a predefined segment as follows. If price gets less than £200 then low value. If price is between £201 and £750 then mid value. If between £750 and £1250 then mid to high value else higher value. Filter the results only for black, silver and red color products.

**Question 7**

How many Distinct Job title is present in the Employee table?

**Question 8**

Use 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 sentiment, if sentiment age is 65?

## Question 11

Implement new price policy on the product table base on the colour of the item

If white increase price by 8%, If yellow reduce price by 7.5%, If black increase price by 17.2%. If multi, silver, silver/black or blue take the square root of the price and double the value. Column should be called Newprice. For each item, also calculate commission as 37.5% of newly computed list price.

## 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 colours, standard cost remains the same

## Question 16

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

NB: Send your answer (SQL code) in Microsoft word to quantumassignmenthub@gmail.com , including your full name and cohort.

# Submission Instructions

**1. Email address for submission:**

To: **quantumassignmenthub@gmail.com**

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