

Evaluación Laboratorio Optimización - 2C 2023

17 de noviembre de 2023

La aprobación requiere 4 ejercicios correctos.

1. Explique las diferencias entre los planes de ejecución de las siguientes consultas:
 - (a) `SELECT d.DepartmentID, d.Name FROM HumanResources.Department AS d`
 - (b) `SELECT d.DepartmentID, d.Name, d.GroupName FROM HumanResources.Department AS d`
2. Compare y explique los planes de las siguientes consultas:
 - (a) `SELECT sod.UnitPrice, AVG(sod.UnitPriceDiscount) FROM Sales.SalesOrderDetail AS sod
where sod.UnitPrice > 800
GROUP BY sod.UnitPrice`
 - (b) `SELECT sod.UnitPrice, AVG(sod.UnitPriceDiscount) FROM Sales.SalesOrderDetail AS sod
GROUP BY sod.UnitPrice
HAVING AVG(sod.UnitPriceDiscount) > .2`
3. Explique por qué se usan planes distintos en las dos consultas siguientes:
 - (a) `SELECT p.Name FROM Production.Product AS p WHERE p.Color = 'Grey'`
 - (b) `SELECT p.Name FROM Production.Product AS p WHERE p.ProductNumber = 'CH-0234'`
4. Explique las siguientes consultas:
 - (a) `SELECT p.Name, p.ProductNumber, th.ReferenceOrderID FROM Production.Product AS p
JOIN Production.TransactionHistory AS th
ON th.ProductID = p.ProductID
WHERE th.ReferenceOrderID = 2550;`
 - (b) `SELECT p.Name, p.ProductNumber, th.ReferenceOrderID FROM Production.Product AS p
JOIN Production.TransactionHistory AS th
ON th.ProductID = p.ProductID
WHERE th.ReferenceOrderID = 53465;`
5. Explique por qué las siguientes consultas tienen planes diferentes:
 - (a) `SELECT th.ProductID, AVG(th.ActualCost) FROM Production.TransactionHistory AS th
GROUP BY th.ProductID`
 - (b) `SELECT th.ProductID, COUNT(th.ActualCost) FROM Production.TransactionHistory AS th
GROUP BY th.ProductID`
6. Compare las siguientes consultas:
 - (a) `SELECT p.LastName + ', ' + p.FirstName, pp.PhoneNumber FROM Person.Person AS p
JOIN Person.PersonPhone AS pp ON pp.BusinessEntityID = p.BusinessEntityID
JOIN Person.PhoneNumberType AS pnt ON pnt.PhoneNumberTypeID = pp.PhoneNumberTypeID
WHERE pnt.Name = 'Cell' AND p.LastName = 'Dempsey';`
 - (b) `SELECT p.LastName + ', ' + p.FirstName, pp.PhoneNumber FROM Person.Person AS p
JOIN Person.PersonPhone AS pp ON pp.BusinessEntityID = p.BusinessEntityID
JOIN Person.PhoneNumberType AS pnt ON pnt.PhoneNumberTypeID = pp.PhoneNumberTypeID
AND p.LastName = 'Dempsey';`