به نام خدا



ازمایشگاه 4 پایگاه داده حدیث غفوری (9825413)

```
select Name, Europe, [North America], Pacific
    from
    (
    select p.Name,[Group],OrderQty
    from Sales.SalesOrderDetail as d
    inner join Sales.SalesOrderHeader as h
    on d.SalesOrderID = h.SalesOrderID
    inner join Sales.SalesTerritory as t
    on h.TerritoryID = t.TerritoryID
    inner join Production.Product as p
    on d.ProductID = p.ProductID
    )as srcTable
    pivot(
    count(OrderQty)
    for [Group] in (Europe, [North America], Pacific)
136 %
Europe North America Pacific
       Name
                                                             65
       All-Purpose Bike Stand
                                  67
                                            117
2
       AWC Logo Cap
                                  1000
                                            1925
                                                             457
       Bike Wash - Dissolver
3
                                                             240
                                  294
                                            793
       Cable Lock
                                  30
                                            230
                                                             0
4
                                  55
                                            167
                                                             28
       Chain

    Query executed successfully.
```

سوال 2

```
    select PersonType,M,F

 from
 (
 select Person.BusinessEntityID, PersonType, Gender
 from Person.Person join HumanResources.Employee
 Person.BusinessEntityID =Employee.BusinessEntityID)
 )as srcTable
 pivot(
 count(BusinessEntityID)
 for Gender in (F,M)
 )as pvt
 PersonType M F
      196 77
 EM
 SP
           10 7
```

سوال 3

```
-----سوال3------
   ∃select Name
    from Production.Product as p
    where LEN(p.Name) < 15
    and
    PATINDEX('%e%',p.Name) = LEN(p.Name) -1;
Name
1
    Front Brakes
2
    HL Crankset
3
    LL Crankset
4
    ML Crankset
5
    Paint - Red
6
    Paint - Silver
7
     Spokes
8
     Stem
```

```
-----سو ال4------
   □IF OBJECT_ID (N'dbo.checkDate', N'FN') IS NOT NULL
    DROP FUNCTION dbo.checkDate;
   CREATE FUNCTION dbo.checkDate(@dateformat varchar(10))
    RETURNS varchar(120)
    AS
    BEGIN
    DECLARE @ans smallint;
    DECLARE @day varchar(2);
    DECLARE @month varchar(2);
    DECLARE @persion_month varchar(20);
    DECLARE @year varchar(4);
    select @day = SUBSTRING(@dateformat,9,10)
    select @month = SUBSTRING(@dateformat,6,7)
    select @year = SUBSTRING(@dateformat,1,4)
    SELECT @ans = CASE
    WHEN @dateformat LIKE '[1-3][0-9][0-9][0-9]/[0-1][0-9]/[0-3][0-9]'
    and @day <32
    and @month<13
135 %
(No column name)
       shamsi1390monthEsfand31
```

```
set @persion_month = 'Shahrivar'
    else if(@month ='07')
        set @persion_month = 'Mehr'
    else if(@month ='08')
        set @persion_month = 'Aban'
    else if(@month ='09')
        set @persion_month = 'Azar'
    else if(@month ='10')
        set @persion_month = 'Dey'
    else if(@month ='11')
        set @persion_month = 'Bahman'
    else if(@month ='12')
        set @persion_month = 'Esfand'
    return 'shamsi'+@year+'month'+@persion_month+@day;
    END
    return 'output format is incorrect';
    return '';
    END;
    GO
  ⊟select dbo.checkDate('1390/12/31');
   135 % 🔻 🔻
(No column name)
       shamsi1390monthEsfand31
```

```
□IF OBJECT_ID (N'find_sales_places', N'IF') IS NOT NULL

DROP FUNCTION find_sales_places;

GO

□CREATE FUNCTION find_sales_places (@entered_year int,@entered_month int,@product_name varchar(60))

RETURNS TABLE

AS

RETURN

(

select distinct t.Name

from Production.Product as p

inner join Sales.SalesOrderDetail as d on (p.ProductID = d.ProductID)

inner join Sales.SalesOrderHeader as h on (d.SalesOrderID = h.SalesOrderID)

inner join Sales.SalesTerritory as t on (t.TerritoryID = h.TerritoryID)

where p.Name = @product_name and month(h.orderDate) = @entered_month and year(h.orderDate) = @entered_ye:

);

GO

Mossages

Commands completed successfully.
```

