

Database

Tahaluf Training Center 2021



Day 5

1 WORKING WITH DATES

2 SQL Subqueries



WORKING WITH DATES

Data type	Format
time	hh:mm:ss[.nnnnnnnn]
date	YYYY-MM-DD
smalldatetime	YYYY-MM-DD hh:mm:ss
datetime	YYYY-MM-DD hh:mm:ss[.nnn]
datetime2	YYYY-MM-DD hh:mm:ss[.nnnnnnnn]
datetimeoffset	YYYY-MM-DD hh:mm:ss[.nnnnnnnn] [+/-]hh:mm



WORKING WITH DATES

The **DATENAME** function returns the name or value of a specific part of the date

```
SELECT DATENAME (WEEKDAY, '2019-01-14') as Datename
```

```
SELECT DATENAME ( WEEKDAY, '1998-10-24') as Datename
```



WORKING WITH DATES

You use the **GETDATE** function to determine the current date and time of the computer running the current SQL instance. This function doesn't include the time zone difference.

```
SELECT GETDATE() as Systemdate
```

```
SELECT CURRENT_TIMESTAMP;
```

```
SELECT DATEADD(WEEKDAY, 7,  
'2017/08/25') AS DateAdd;
```



WORKING WITH DATES

```
SELECT DATEADD(YEAR, 7,  
'2017/08/25') AS DateAdd;
```

```
SELECT DATEADD(MONTH, 3,  
'2017/08/25') AS DateAdd;
```

```
SELECT DATEADD(WEEKDAY, 7,  
'2017/08/25') AS DateAdd;
```



WORKING WITH DATES

The **DATEDIFF** function returns the difference between two dates.

```
SELECT SalesOrderID, DATEDIFF(day,  
OrderDate, ShipDate)  
AS 'Processing time'  
FROM Sales.SalesOrderHeader
```



Day 5

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WORKING WITH DATES

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SQL Subqueries



Subqueries

Subqueries are nested queries that make references to the current row of their outer query:

```
SELECT BusinessEntityID, JobTitle, SickLeaveHours
FROM HumanResources.Employee AS eOuter
WHERE SickLeaveHours > (
  SELECT AVG(SickLeaveHours)
  FROM HumanResources.Employee eInner
  WHERE eInner.OrganizationLevel = eOuter.OrganizationLevel )
order by SickLeaveHours desc
```



Subqueries

```
SELECT Ord.SalesOrderID, Ord.OrderDate,  
       (SELECT MAX(OrdDet.UnitPrice)  
        FROM Sales.SalesOrderDetail AS OrdDet  
        WHERE Ord.SalesOrderID = OrdDet.SalesOrderID) AS  
MaxUnitPrice  
FROM Sales.SalesOrderHeader AS Ord;
```

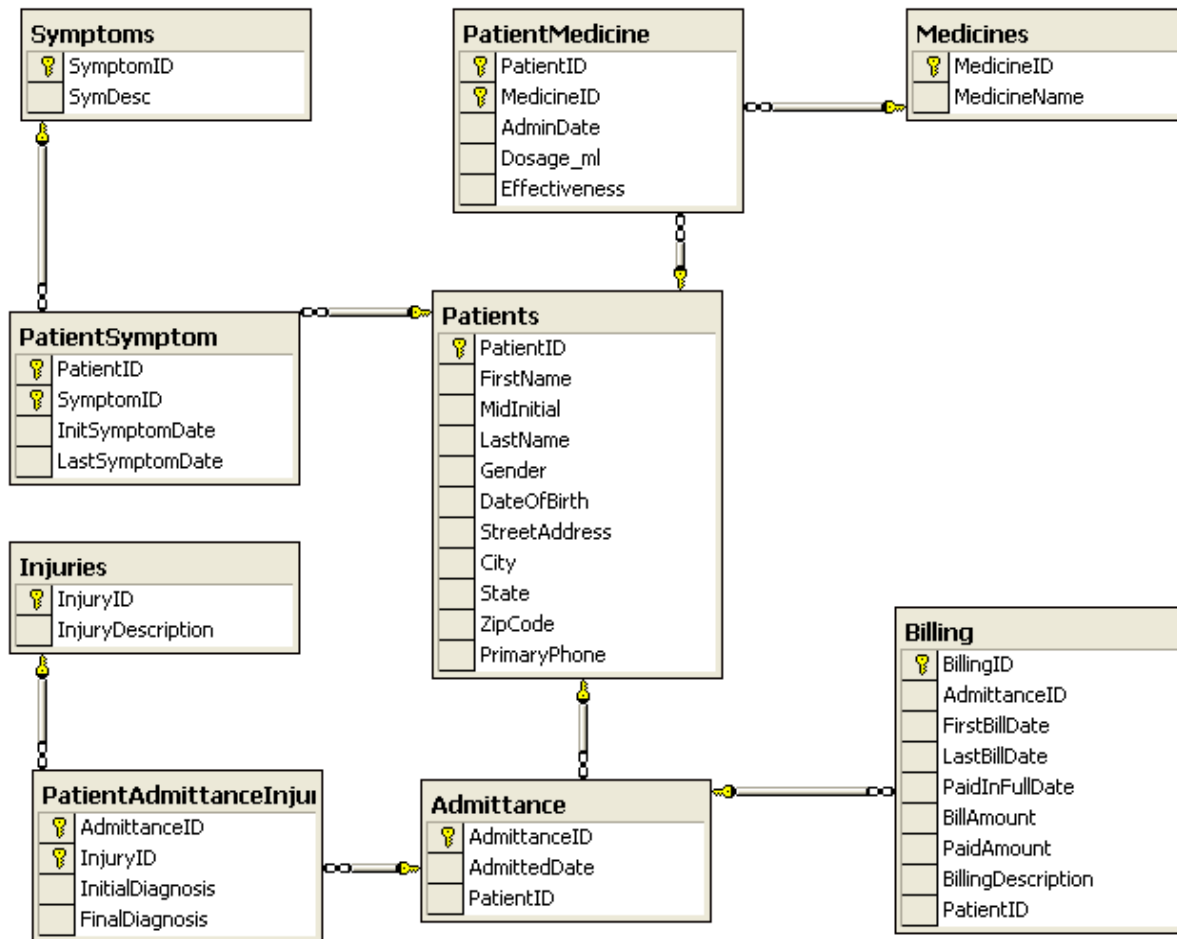
```
SELECT Name  
FROM Production.Product  
WHERE ListPrice = (SELECT ListPrice  
                   FROM Production.Product  
                   WHERE Name = 'Chainring Bolts' )
```



Day Five Task



شركة تحالف الإمارات للحلول التقنية ذ.م.م.
TAHALUF AL EMARAT TECHNICAL SOLUTIONS L.L.C.



Day Five Task

Day 5 Task:

1. Create the following database using this Database Diagram.
2. Then populate each table with 3 records
3. Create 6 stored procedures, 3 without parameters and 3 with one or more parameters using **date functions**.
4. Generate its script and upload it
5. Make sure to submit it before deadline

