IS475/675 – Answers to SQL Join Lab on 03/08/2016

Task 2.

```
select emp.empid,
       emp.lastname,
       emp.firstname,
       jobtitle.title
from   labemp emp
left outer join labjobtitle jobtitle
on     emp.jobtitleid = jobtitle.jobtitleid
order by emp.empid;
```

Task 3.

```
select     emp.empid,
           emp.lastname,
           emp.firstname,
           ISNULL(jobtitle.title, '**Missing**') JobTitle
from   labemp emp
left outer join labjobtitle jobtitle
on     emp.jobtitleid = jobtitle.jobtitleid
order by emp.empid;
```

Task 4.

```
Select     emp.empid,
           emp.lastname,
           emp.firstname,
           ISNULL(jobtitle.title, '**Missing**') JobTitle,
           tw.startwork,
           tw.minutes/60  HoursWorked
from   labemp emp
left outer join labjobtitle jobtitle
on     emp.jobtitleid = jobtitle.jobtitleid
inner join labtimeworked tw
on     emp.empid = tw.empid
order by emp.empid;
```

Task 5.

```
select emp.empid,
       emp.lastname,
       emp.firstname,
       ISNULL(jobtitle.title, '**Missing**') JobTitle,
       tw.startwork,
       tw.minutes/60  HoursWorked
from   labemp emp
left outer join labjobtitle jobtitle
on     emp.jobtitleid = jobtitle.jobtitleid
left outer join labtimeworked tw
on     emp.empid = tw.empid
order by emp.empid;
```

Task 6.

```sql
select      emp.empid,
            emp.lastname,
            emp.firstname,
            ISNULL(jobtitle.title, '**Missing**') JobTitle,
            tw.startwork,
            tw.minutes/60  HoursWorked
from    labemp emp
left outer join labjobtitle jobtitle
on      emp.jobtitleid = jobtitle.jobtitleid
left outer join labtimeworked tw
on      emp.empid = tw.empid
where month(startwork) = 3 and year(startwork) = year(getdate())
order by emp.empid;
```

Task 7.

```sql
select      emp.empid,
            emp.lastname,
            emp.firstname,
            ISNULL(jobtitle.title, '**Missing**') JobTitle,
            tw.startwork,
            work.description,
            tw.minutes/60  HoursWorked
from    labemp emp
left outer join labjobtitle jobtitle
on      emp.jobtitleid = jobtitle.jobtitleid
left outer join labtimeworked tw
on      emp.empid = tw.empid
inner join labwork work
on      tw.worktypeid = work.worktypeid
where month(startwork) = 3 and year(startwork) = year(getdate())
order by emp.empid;
```

Task 8.

```sql
select      emp.empid,
            emp.lastname,
            emp.firstname,
            ISNULL(jobtitle.title, '**Missing**') JobTitle,
            tw.startwork,
            work.description,
            tw.contractid,
            convert(varchar,contract.datedue, 107) DateDue,
            tw.minutes/60  HoursWorked
from    labemp emp
left outer join labjobtitle jobtitle
on      emp.jobtitleid = jobtitle.jobtitleid
left outer join labtimeworked tw
on      emp.empid = tw.empid
inner join labwork work
on      tw.worktypeid = work.worktypeid
inner join labcontract contract
on          tw.contractid = contract.contractid
where month(startwork) = 3 and year(startwork) = year(getdate())
order by emp.empid;
```

Task 9.

```
select      emp.empid,
            emp.lastname,
            emp.firstname,
            ISNULL(jobtitle.title, '**Missing**') JobTitle,
            tw.startwork,
            work.description,
            tw.contractid,
            convert(varchar,contract.datedue, 107) DateDue,
            client.name,
            tw.minutes/60  HoursWorked
from    labemp emp
left outer join labjobtitle jobtitle
on      emp.jobtitleid = jobtitle.jobtitleid
left outer join labtimeworked tw
on      emp.empid = tw.empid
inner join labwork work
on      tw.worktypeid = work.worktypeid
inner join labcontract contract
on          tw.contractid = contract.contractid
inner join labclient client
on      contract.clientid = client.clientid
where month(startwork) = 3 and year(startwork) = year(getdate())
order by emp.empid;
```

Task 10.

```
SELECT      emp.empid,
            lastname,
            sum(minutes/60) TotalHoursWorked
FROM        labemp emp
inner join labtimeworked tw
on          emp.empid = tw.empid
group by emp.empid,
        emp.lastname
```

Task 11.

```
SELECT      emp.empid,
            lastname,
            sum(minutes/60) TotalHoursWorked
FROM    labemp emp
LEFT OUTER join labtimeworked tw
on          emp.empid = tw.empid
group by emp.empid,
        emp.lastname
```

Task 12.

```
SELECT       emp.empid,
             lastname,
             count(tw.empid) CountOfRows,
             avg(minutes/60) AverageHoursPerRow,
             sum(minutes/60) TotalHoursWorked
FROM     labemp emp
left outer join labtimeworked tw
on          emp.empid = tw.empid
group by emp.empid,
         emp.lastname
```

Task 13.

```
SELECT       emp.empid,
             lastname,
             count(tw.empid) CountOfRows,
             ISNULL(avg(minutes/60),0) AverageHoursPerRow,
             ISNULL(sum(minutes/60),0) TotalHoursWorked
FROM     labemp emp
left outer join labtimeworked tw
on          emp.empid = tw.empid
group by emp.empid,
         emp.lastname
```

Task 14.

```
SELECT       emp.empid,
             lastname + ', ' + substring(firstname,1,1) + '.' EmployeeName,
             emp.billingrate
FROM  labemp emp
where  emp.billingrate =
        (SELECT max(billingrate)
         FROM labemp)
```

Task 15.

```
SELECT       emp.empid,
             lastname + ', ' + substring(firstname,1,1) + '.' EmployeeName,
             ISNULL(jt.title, '**Missing**') JobTitle,
             emp.billingrate
FROM  labemp emp
LEFT OUTER JOIN labjobtitle jt
ON  emp.jobtitleid = jt.jobtitleid
where  emp.billingrate =
        (SELECT max(billingrate)
         FROM labemp)
```