```sql
--1
if(NOT Exists (select ID from person where ID='123456789')) BEGIN --<-- (1)
  input {ID}
insert into person values ('123456789', 'AAA', 'BBB','1991-01-01') --<-- (4)
  inputs {ID FirstName LastName DateOfBirth}
insert into student values ('123456789')  END --<-- (1) input {ID}
else RAISERROR (1,16,1)


--2
update Person SET FirstName='AAA', LastName='BBB', DateOfBirth='1991-01-01'
  where ID='123456789' --<-- (4) inputs {FirstName LastName DateOfBirth ID}


--3
delete LearnsIn where StudentID='123456789' --<-- (1) input {ID}
delete StudentInCourse where StudentID='123456789' --<-- (1) input {ID}
delete Student where StudentID='123456789' --<-- (1) input {ID}




--4
select StudentID, FirstName+' '+LastName FullName,CourseName
from Person P join StudentInCourse SIC on ID=StudentID join Course C ON
  SIC.CourseCode=C.CourseCode
group by StudentID,FirstName,LastName, CourseName
having count(*)>=2
order by StudentID




--5
select CourseCode, SchoolYear, SemesterName from Course
EXCEPT
select CourseCode, SchoolYear, SemesterName from InstructionGroup




--6
select top 1 TeacherID, FirstName+' '+LastName FullName, SchoolYear
from CourseTeacher join Person on TeacherID=ID
where TeacherID='202562013' --<-- (1) input {TeacherID}
group by TeacherID, FirstName, LastName, SchoolYear
order by SchoolYear




--7
select TeacherID, FirstName+' '+LastName FullName, COUNT(*) Cnt
from CourseTeacher join Person on TeacherID=ID
where TeacherID='202562013' and SchoolYear=2017 --<-- (2) inputs {TeacherID
  SchoolYear}
group by TeacherID, FirstName, LastName
```

```sql
--8
select TeacherID,FirstName+' '+LastName FullName, I.CourseName, I.SemesterName,
  I.SchoolYear, Avarage
from ( select C.CourseCode, C.CourseName, C.SemesterName, C.SchoolYear, CONVERT
  (decimal(5,3),AVG(Grade)) Avarage
        from StudentInCourse SIC join Course C on SIC.CourseCode=C.CourseCode
        where C.CourseCode=490 --<-- (1) input {C.CourseCode}
        group by C.CourseCode, C.CourseName, C.SemesterName, C.SchoolYear
        )I left join CourseTeacher CT on I.CourseCode=CT.CourseCode left join
         Person on TeacherID=ID




--9
select distinct StudentID, FirstName+' '+LastName FullName, YEAR(GETDATE())-YEAR
  (DateOfBirth) Age
from StudentInCourse join Person on StudentID=ID
where StudentID not in ( select StudentID from StudentInCourse where
  SchoolYear=2018 ) --<-- (1) input {SchoolYear}




--10
select StudentID, CourseCode, SchoolYear, CASE SemesterName WHEN 'Winter' THEN 0
    WHEN 'Spring' THEN 1 WHEN 'Summer' THEN 2 END Semester
into #tempCourseBySemesterNumbering
from StudentInCourse

declare @Semester int, @Year int; set @Semester=1; set @Year=2017;  --<-- (2)
  inputs {set @Semester  set @Year}
select distinct StudentID,  FirstName+' '+LastName FullName, CASE Semester WHEN
  0 THEN 'Winter' WHEN 1 THEN 'Spring' WHEN 2 THEN 'Summer' END +' '+ CONVERT
  (varchar(4),SchoolYear) SemesterName from #tempCourseBySemesterNumbering I
  join Person on StudentID=ID
where Semester=(@Semester +1)%3 and SchoolYear= @Year + (@Semester +1)/3 and
  StudentID in (
          select  StudentID
            from #tempCourseBySemesterNumbering I1
            where Semester=(@Semester +1)%3 and SchoolYear= @Year +
              (@Semester +1)/3
            group by StudentID
            HAVING COUNT(CourseCode) <=
                  (select COUNT(CourseCode) CNT
                  from #tempCourseBySemesterNumbering I
                  where Semester=@Semester and SchoolYear= @Year AND
              StudentID=I1.StudentID
                  group by StudentID)
        )
order by StudentID

drop table #tempCourseBySemesterNumbering
```