

## SQL Interview Question

There is an excel sheet provided with three tabs: Case Table, Provider Table and Member Table.

The first tab (Case Table) contains members admitted due to their chronic conditions (Diag). The table has fields MemberID, Dependent, DATE, DischargeDate, CaseNumber, Diag (Diagnosis code). The Memberid is the identifier of the policy holder. The Dependent field indicates the relative of a policy holder. For example, a dependent number 0 indicates the policy holder, 1 indicates a spouse of the policy holder and 2, 3,4... indicates the children of the policy holder. The Date field is the date a member was admitted at the hospital. The DischargeDate is the date the member was discharged from the hospital. The CaseNumber is a unique identifier of case. The Diag is the diagnosis code used to diagnose the member.

The second tab (provider Table) contains information of the hospital a member was admitted. MemberID is the member identifier, CaseNumber is the case for the member at the admission period, AdmitDate is the Date the member was admitted, and Provider is the Hospital the member was admitted to.

The final tab (Member Table) has the member's information with fields MemberID, DateOfBirth and Gender.

1. Our goal is to create a report that contains the length of stay of each member in the hospital and flag ('Y','N') of all readmissions. Note: Readmission is when a member returns to the hospital within 30days after being discharged.  
The report should have fields Memberid, Dependent, DateofBirth, Gender, CaseNumber, AdmitDate, LengthofStay, Diag, Readmission, Provider.

**Hint: Date and AmitDate are the same event. Only that the AdmitDate has a datetime format (includes minutes and seconds), and Date is month/day/year only. Also, a caution when joining. The 'Memberid' field in the Provider table and the Member table are concatenation of 'MemberID' field and 'Dependent' field in the Case Table.**

2. We also want to know which chronic condition has a high rate of admission. In this case, we will need a report of the diagnosis codes with their frequencies (counts) sorted in descending order.

You will only need to provide the code on how you joined tables and created the report by replying to the email used to submit this question.

Feel free to contact us if you have any questions. Thank you.