**SQL questions** asked in top product based companies:  
  
Question 1:    
Imagine a table named "Movies" with columns: MovieID, Title, ReleaseDate, GenreID. There's another table "Genres" with columns: GenreID, GenreName. Write a SQL query to fetch the genres that don't have any movies associated with them.

SELECT G.GenreID, G.GenreName

FROM Genres G

LEFT JOIN Movies M ON G.GenreID = M.GenreID

WHERE M.MovieID IS NULL;

Question 2:   
You are given a table named "Attendance" with columns: StudentID, ClassDate, IsPresent (a boolean where 1 indicates presence and 0 indicates absence). Write a SQL query to identify students who have missed more than 3 consecutive classes.

WITH ConsecutiveAbsence AS (

SELECT

StudentID,

ClassDate,

IsPresent,

ROW\_NUMBER() OVER (PARTITION BY StudentID ORDER BY ClassDate) -

ROW\_NUMBER() OVER (PARTITION BY StudentID, IsPresent ORDER BY ClassDate) AS GroupID

FROM Attendance

)

SELECT DISTINCT StudentID

FROM ConsecutiveAbsence

WHERE IsPresent = 0

GROUP BY StudentID, GroupID

HAVING COUNT(\*) > 3;  
  
Question 3:    
Consider a table named "Elections" with columns: CandidateID, VoterID, VoteDate. Write a SQL query to calculate the candidate who received the highest number of votes each month.  
  
Question 4:  
You have a table named "ProductSales" with columns: ProductID, SaleDate, UnitsSold. Write a SQL query to find the top 3 products that have shown the most significant sales growth month-over-month.  
  
Question 5:  
You are provided with a table named "LibraryBooks" with columns: BookID, BorrowerID, BorrowDate, ReturnDate. Write a SQL query to find out which books are currently borrowed and have passed their return date without being returned.  
  
Question 6:  
Consider a table named "OnlineCourses" with columns: CourseID, EnrollmentDate, StudentID, CompletionDate. Write a SQL query to determine the courses which have the highest drop rate (i.e., students enrolling but not completing).  
  
Question 7:  
You have a table named "EmployeeFeedback" with columns: EmployeeID, FeedbackDate, Rating (from 1 to 10). Write a SQL query to identify employees whose rating has been declining for the past 3 consecutive feedbacks.  
  
Question 8:  
There are two tables: "BlogPosts" and "Comments". The "BlogPosts" table has columns: PostID, Title, PostDate, AuthorID. The "Comments" table has columns: CommentID, PostID, CommentDate, Text. Write a SQL query to fetch the blog posts that have not received any comments within a week of their posting.  
  
Question 9:    
You are given a table named "Subscription" with columns: UserID, SubscriptionDate, ExpiryDate. Write a SQL query to count the number of active subscriptions on the first day of each month in the past year.  
  
Question 10:    
Consider a table named "TouristSpots" with columns: SpotID, SpotName, VisitorID, VisitDate. Write a SQL query to find the least visited tourist spots in the last summer.  
  
Question 11:  
There are two tables: "Books" and "Authors". The "Books" table has columns: BookID, BookName, AuthorID, SoldCopies. The "Authors" table has columns: AuthorID, AuthorName. Write a SQL query to find authors whose books, on average, have sold more than 10,000 copies, but have written less than 3 books.  
  
Question 12:  
You have a table named "FlightBookings" with columns: BookingID, FlightDate, PassengerID, Destination. Write a SQL query to determine which destination has seen a steady month-on-month increase in bookings over the last year.