# T-SQL Homework 11 - A

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1. Why do we use variables in T-SQL? HOw do you declare and initialize T-SQL variables?

+ You use variables to temporarily store data values for later use in the same batch in which they were declared. use Declare to initialize and set to assign value. DECLARE @i AS INT; SET @i = 10; or DECLARE @i AS INT = 10;

2. Describe what is meant by a batch ﬁle in T-SQL? What is the difference between batches and transactions?

+ batch is one T-SQL statement or more sent to Microsoft SQL Server by the client for execution as a single unit. A transaction is a single statement from start to end.

3. What is the scope of variables with respect to T-SQL batches?

+ it is local to a defined batch.

4. Write a T-SQL code snippet that returns a data element stating whether the current person can legally purchase alcohol, that is, has reached his 21st birthday.

+ SELECT personname as Name, birthday as Bday FROM PersonData WHERE birthday < '1998-03-28' ;

5. (Not in book) Does T-SQL have a FOR loop construction?

+ no but it can be simulated using while loop.

6. What is a cursor? What is the difference between a relation and a cursor?

+ a nonrelational result with order guaranteed among rows.

7. How do you declare a temporary table? Why would you declare a temporary table?

+ using the create table syntax but using a pound sign. if you dont have permissions to create a new one.

8. What is the difference between a stored procedure, a user defined function, and a trigger?

+ stored procedure can return sets and can make database and schema changes. user defined cant make any schema or database changes they just return scalar values. a trigger is tied to an event and cant be used with out one.

9. Write a user defined function that returns a Booleans as to whether a customer may purchase alcohol as of the instant that the function runs.

+ DROP PROC IF EXISTS DrinkingAGE @personname as NVARCHAR, @Bday as DATE = '1998-03-28' RETRUN SELECT personname as Name, birthday as Bday FROM PersonData WHERE birthday < @Bday ;

10. Write a trigger that places a customer in the OFF LIMITS table if he attempt to purchase alcohol when he is underage.

+ CREATE TRIGGER insert\_Underage ON dbo.T1 AFTER INSERT

AS

SET NOCOUNT ON;

INSERT INTO dbo.T1\_Audit(username, birthday)

SELECT name, birthday FROM inserted;

GO

11. Write a stored procedure that deletes customers from the OFF LIMITS table when they have reached their 21st birthday.

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