**1) What is a temporal table?**

-A temporal table is a table that has two columns representing the validity period of the row, plus a linked history table with a mirrored schema holding older states of modified rows.

**2) Under what circumstances would you use a temporal table? Temporal tables are in widespread use in certain kinds of businesses.**

-A temporal table can be used to query the previous states of a table, for example if a business wanted to compare any current data values against historical values on record.

**3) What are the semantics of a temporal table? There are seven of them.**

-The seven semantics of a temporal table are:

1- A primary key

2- Two columns defined as DATETIME2 with any precision, which are non-nullable and represent

the start and end of the row’s validity period in the UTC time zone.

3- A start column that should be marked with the option GENERATED ALWAYS AS ROW START

4- An end column that should be marked with the option GENERATED ALWAYS AS ROW END

5- A designation of the period columns with the option PERIOD FOR SYSTEM\_TIME

(<startcol>, <endcol>)

6- The table option SYSTEM\_VERSIONING, which should be set to ON

7- A linked history table to hold the past states of modified rows.

**4) How do you search a history table?**

-You search a table history in the same manner that you would any other table, you just specify FOR SYSTEM\_TIME.

**5) How do you modify a history table?**

-You can modify a history table in the same manner you modify a regular table. You can modify only the current table with the INSERT, DELETE, MERGE, and UPDATE statements.

**6) How do you delete data from a history table? Why would you want to delete data from a history table?**

-To delete data from a history table, you can create a CTE to successfully identify the data that you would like to delete and then change the SELECT keyword to the DELETE keyword. You would want to delete data from a history table in instances where the source table is updated frequently, which would cause the history table to rapidly grow.

**7) How do you search a history table?**

Isn’t this a repeat question… You search a table history in the same manner that you would any other table, you just specify FOR SYSTEM\_TIME.

**8) How do you query all data from both a history file and the current data?**

-You can query all the data from both a history file and the current data by using the FOR SYSTEM\_TIME keyword because it allows you to specify the time or range you want to query from. SQL will search all the tables in the database to meet your search criteria. You can also use the ALL keyword in conjunction with the FOR SYSTEM\_TIME keyword which will query all the rows from both tables.

**9) How do you drop a temporal table?**

-You can drop a temporal table by using the DROP TABLE keyword and then specifying the table name.