HOW DO I RECORD EXECUTION TIME OF MY T-SQL CODE?

This is for **SQL Server** specifically.

The first thing you can do is simply compare the difference between the timestamp **BEFORE** your query, and the timestamp **AFTER**. For example:

```
DECLARE @a DATETIME, @b DATETIME
SET @a = CURRENT_TIMESTAMP

DECLARE @i INT
SET @i = 0
WHILE @i < 10000
BEGIN
    SET @i = @i + 1
END
SET @b = CURRENT_TIMESTAMP
SELECT DATEDIFF(MS, @a, @b)
```

You can achieve similar results by running **SQL Profiler**, setting appropriate filters, and watching the **Duration** column as your query runs.

Finally, you can alter the above code slightly so that you see all of the durations on the messages tab of **Query Analyzer**:

```
SET STATISTICS TIME ON
    – query here
SET STATISTICS TIME OFF
```

Then if you look in **Query Analyzer's Messages** tab, you will see the number of _milliseconds_ taken by each step in your query.

Obviously, this is much more useful for queries with a reasonable amount of unique queries, and doesn't do much good for code with loops. This particular **STATISTICS** option prints durations for every single operation (_each iteration of a loop is recorded_), so there will be 10,000 messages, likely all stating **0 ms**. This could really impact the time it takes to execute a query.

What you can do after this, to compare two queries (and perhaps get to the bottom of why one takes longer than the other), is to turn on **Show Execution Plan** (**CTRL+K**) and view that tab after your queries are finished.

You will be able to spot table scans and other operations with high I/O or CPU costs.