Integer Data Types

Hive and Impala support four integer data types: TINYINT, SMALLINT, INT, and BIGINT. These represent whole numbers with no fractional parts.

Larger integer types allow you to represent larger ranges of numbers, as shown in the table below, but processing them requires more memory, so you should generally use the smallest integer type that accommodates the full range of values in your data.

| Integer Type | Range |
|-----------------|---|
| TINYIN T | -128 to 127 |
| SMALLI NT | -32,768 to 32,767 |
| INT | -2,147,483,648 to 2,147,483,647 (approximately 2.1 billion) |
| BIGINT | -9,223,372,036,854,775,808 to 9,223,372,036,854,775,807 (approximately 9.2 quintillion) |

Unlike in some relational databases, all integer types in Hive and Impala are signed; that is, they can represent positive or negative integer values. There are no unsigned integer types.