```
  SELECT artist.name, COUNT(work.artist_id) AS number_of_works
  FROM artist LEFT JOIN work ON artist.id = work.artist_id
  GROUP BY artist.id;
```

You can also explicitly specify the data type for a column in the created table:

```
CREATE TABLE foo (a TINYINT NOT NULL) SELECT b+1 AS a FROM bar;
```

For `CREATE TABLE ... SELECT`, if `IF NOT EXISTS` is given and the target table exists, nothing is inserted into the destination table, and the statement is not logged.

To ensure that the binary log can be used to re-create the original tables, MySQL does not permit concurrent inserts during `CREATE TABLE ... SELECT`. However, prior to MySQL 8.0.21, when a `CREATE TABLE ... SELECT` operation is applied from the binary log when row-based replication is in use, concurrent inserts are permitted on the replicated table while copying data. That limitation is removed in MySQL 8.0.21 on storage engines that support atomic DDL. For more information, see Section 13.1.1, “Atomic Data Definition Statement Support”.

You cannot use `FOR UPDATE` as part of the `SELECT` in a statement such as `CREATE TABLE new_table SELECT ... FROM old_table ...`. If you attempt to do so, the statement fails.

`CREATE TABLE ... SELECT` operations apply `ENGINE_ATTRIBUTE` and `SECONDARY_ENGINE_ATTRIBUTE` values to columns only. Table and index `ENGINE_ATTRIBUTE` and `SECONDARY_ENGINE_ATTRIBUTE` values are not applied to the new table unless specified explicitly.

13.1.20.5 FOREIGN KEY Constraints

MySQL supports foreign keys, which permit cross-referencing related data across tables, and foreign key constraints, which help keep the related data consistent.

A foreign key relationship involves a parent table that holds the initial column values, and a child table with column values that reference the parent column values. A foreign key constraint is defined on the child table.

The essential syntax for a defining a foreign key constraint in a `CREATE TABLE` or `ALTER TABLE` statement includes the following:

```
[CONSTRAINT [symbol]] FOREIGN KEY
    [index_name] (col_name, ...)
    REFERENCES tbl_name (col_name,...)
    [ON DELETE reference_option]
    [ON UPDATE reference_option]

reference_option:
    RESTRICT | CASCADE | SET NULL | NO ACTION | SET DEFAULT
```

Foreign key constraint usage is described under the following topics in this section:

- Identifiers
- Conditions and Restrictions
- Referential Actions
- Foreign Key Constraint Examples
- Adding Foreign Key Constraints
- Dropping Foreign Key Constraints