Database Management Systems
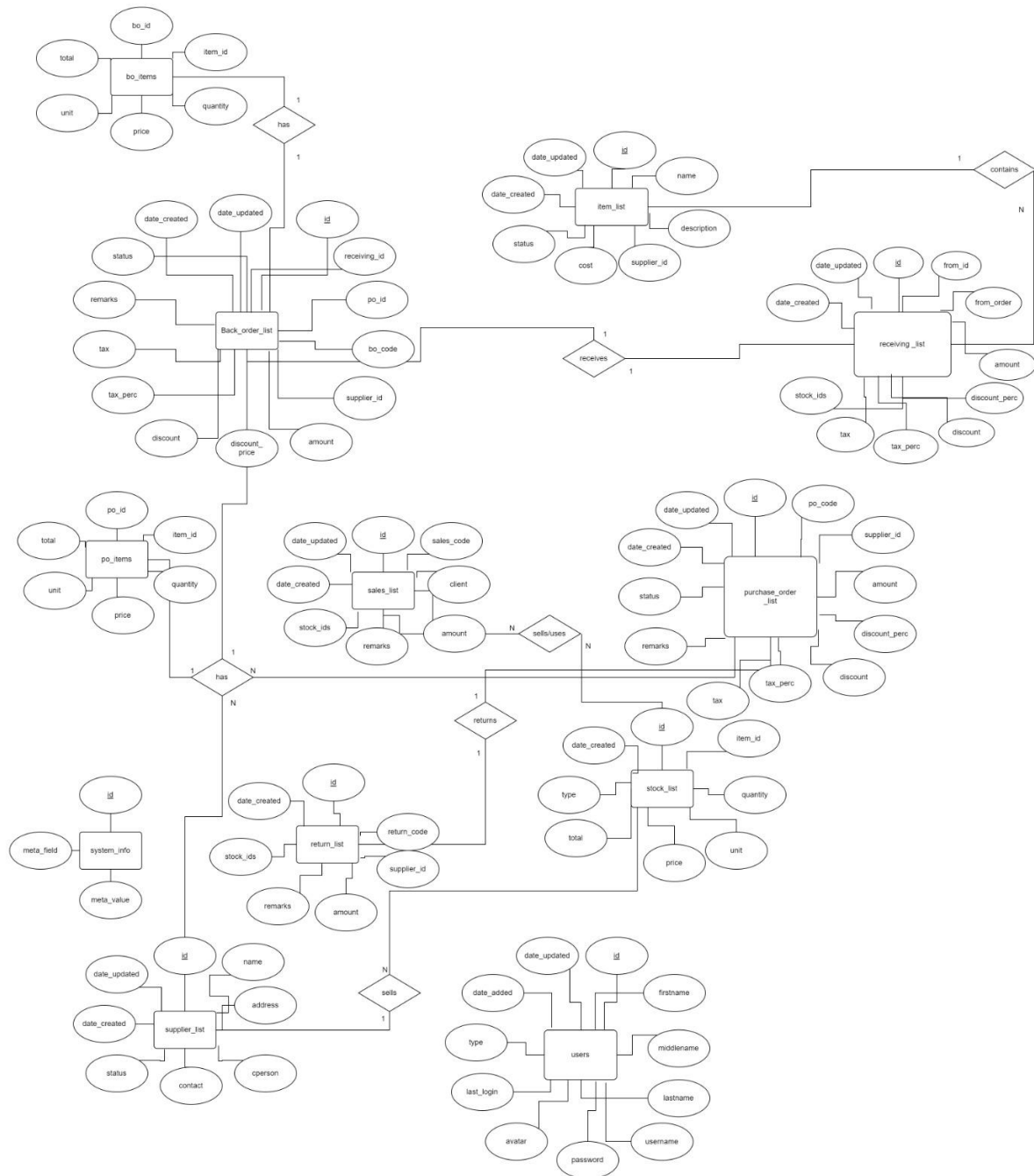## Project Report
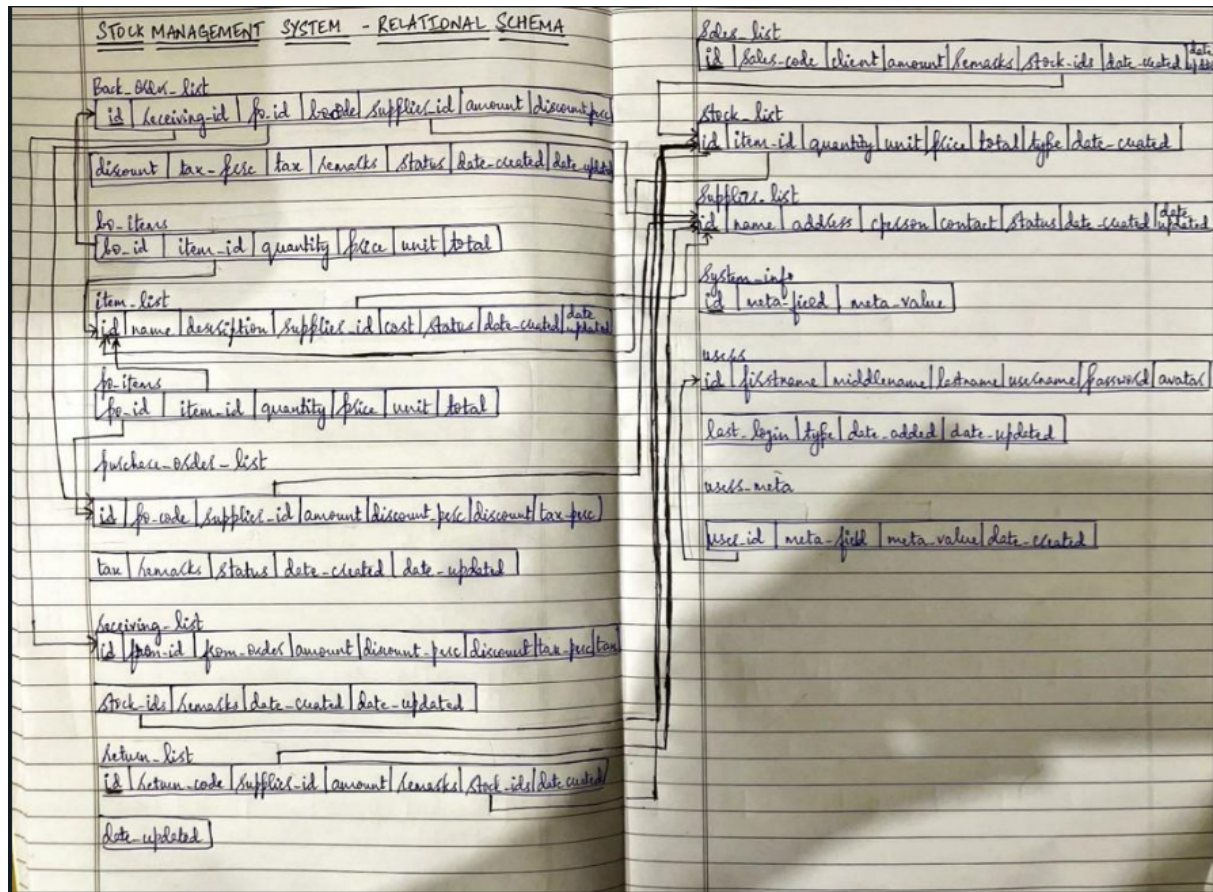
Rashmi J

Raghav S

PES1UG21CS480

PES1UG21CS469

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Stock Management System

E-R Diagram

Relational Schema

Queries

```
PES1UG21CS480> CREATE TABLE `back_order_list` (
    ->    `id` int(30) NOT NULL,
    ->    `receiving_id` int(30) NOT NULL,
    ->    `po_id` int(30) NOT NULL,
    ->    `bo_code` varchar(50) NOT NULL,
    ->    `supplier_id` int(30) NOT NULL,
    ->    `amount` float NOT NULL,
    ->    `discount_perc` float NOT NULL DEFAULT 0,
    ->    `discount` float NOT NULL DEFAULT 0,
    ->    `tax_perc` float NOT NULL DEFAULT 0,
    ->    `tax` float NOT NULL DEFAULT 0,
    ->    `remarks` text DEFAULT NULL,
    ->    `status` tinyint(4) NOT NULL DEFAULT 0 COMMENT '0 = pending, 1 = partially received, 2 =received',
    ->    `date_created` datetime NOT NULL DEFAULT current_timestamp(),
    ->    `date_updated` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 5 warnings (0.05 sec)
```

```
PES1UG21CS480> desc back_order_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   |     | NULL              |                                               |
| receiving_id  | int         | NO   |     | NULL              |                                               |
| po_id         | int         | NO   |     | NULL              |                                               |
| bo_code       | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   |     | NULL              |                                               |
| amount        | float       | NO   |     | NULL              |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| remarks       | text        | YES  |     | NULL              |                                               |
| status        | tinyint     | NO   |     | 0                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
14 rows in set (0.00 sec)

PES1UG21CS480> |
```

```
PES1UG21CS480> INSERT INTO `back_order_list` (`id`, `receiving_id`, `po_id`, `bo_code`, `supplier_id`, `amount`, `discount_perc`, `di
scount`, `tax_perc`, `tax`, `remarks`, `status`, `date_created`, `date_updated`) VALUES
    -> (1, 1, 1, 'BO-0001', 1, 40740, 3, 1125, 12, 4365, NULL, 1, '2021-11-03 11:20:38', '2021-11-03 11:20:51'),
    -> (2, 2, 1, 'BO-0002', 1, 20370, 3, 562.5, 12, 2182.5, NULL, 2, '2021-11-03 11:20:51', '2021-11-03 11:21:00'),
    -> (3, 4, 2, 'BO-0003', 2, 42826, 5, 2012.5, 12, 4588.5, NULL, 1, '2021-11-03 11:51:41', '2021-11-03 11:52:02'),
    -> (4, 5, 2, 'BO-0004', 2, 10640, 5, 500, 12, 1140, NULL, 2, '2021-11-03 11:52:02', '2021-11-03 11:52:15');
Query OK, 4 rows affected (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 0
```

```
PES1UG21CS480> select * from back_order_list;
+----+--------------+-------+---------+-------------+--------+---------------+----------+----------+--------+---------+--------+-----
----------------+---------------------+
| id | receiving_id | po_id | bo_code | supplier_id | amount | discount_perc | discount | tax_perc | tax    | remarks | status | date
_created       | date_updated        |
+----+--------------+-------+---------+-------------+--------+---------------+----------+----------+--------+---------+--------+-----
----------------+---------------------+
|  1 |            1 |     1 | BO-0001 |           1 |  40740 |             3 |     1125 |       12 |   4365 | NULL    |      1 | 2021
-11-03 11:20:38 | 2021-11-03 11:20:51 |
|  2 |            2 |     1 | BO-0002 |           1 |  20370 |             3 |    562.5 |       12 | 2182.5 | NULL    |      2 | 2021
-11-03 11:20:51 | 2021-11-03 11:21:00 |
|  3 |            4 |     2 | BO-0003 |           2 |  42826 |             5 |   2012.5 |       12 | 4588.5 | NULL    |      1 | 2021
-11-03 11:51:41 | 2021-11-03 11:52:02 |
|  4 |            5 |     2 | BO-0004 |           2 |  10640 |             5 |      500 |       12 |   1140 | NULL    |      2 | 2021
-11-03 11:52:02 | 2021-11-03 11:52:15 |
+----+--------------+-------+---------+-------------+--------+---------------+----------+----------+--------+---------+--------+-----
----------------+---------------------+
4 rows in set (0.00 sec)
```

Back_order_list
Bo_items

```
PES1UG21CS480> CREATE TABLE `bo_items` (
    ->    `bo_id` int(30) NOT NULL,
    ->    `item_id` int(30) NOT NULL,
    ->    `quantity` int(30) NOT NULL,
    ->    `price` float NOT NULL DEFAULT 0,
    ->    `unit` varchar(50) NOT NULL,
    ->    `total` float NOT NULL DEFAULT 0
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 3 warnings (0.03 sec)
```

```
PES1UG21CS480> desc bo_items;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| bo_id    | int         | NO   |     | NULL    |       |
| item_id  | int         | NO   |     | NULL    |       |
| quantity | int         | NO   |     | NULL    |       |
| price    | float       | NO   |     | 0       |       |
| unit     | varchar(50) | NO   |     | NULL    |       |
| total    | float       | NO   |     | 0       |       |
+----------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

```
PES1UG21CS480> INSERT INTO `bo_items` (`bo_id`, `item_id`, `quantity`, `price`, `unit`, `total`) VALUES
    -> (1, 1, 250, 150, 'pcs', 37500),
    -> (2, 1, 125, 150, 'pcs', 18750),
    -> (3, 2, 150, 200, 'Boxes', 30000),
    -> (3, 4, 50, 205, 'pcs', 10250),
    -> (4, 2, 50, 200, 'Boxes', 10000);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

```
PES1UG21CS480> select * from bo_items;
+-------+---------+----------+-------+-------+-------+
| bo_id | item_id | quantity | price | unit  | total |
+-------+---------+----------+-------+-------+-------+
|     1 |       1 |      250 |   150 | pcs   | 37500 |
|     2 |       1 |      125 |   150 | pcs   | 18750 |
|     3 |       2 |      150 |   200 | Boxes | 30000 |
|     3 |       4 |       50 |   205 | pcs   | 10250 |
|     4 |       2 |       50 |   200 | Boxes | 10000 |
+-------+---------+----------+-------+-------+-------+
5 rows in set (0.00 sec)
```

Item_list

```
PES1UG21CS480> CREATE TABLE `item_list` (
    ->   `id` int(30) NOT NULL,
    ->   `name` text NOT NULL,
    ->   `description` text NOT NULL,
    ->   `supplier_id` int(30) NOT NULL,
    ->   `cost` float NOT NULL DEFAULT 0,
    ->   `status` tinyint(1) NOT NULL DEFAULT 1,
    ->   `date_created` datetime NOT NULL DEFAULT current_timestamp(),
    ->   `date_updated` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 3 warnings (0.04 sec)
```

```
PES1UG21CS480> desc item_list;
+--------------+------------+------+-----+-------------------+-------------------------------------------------+
| Field        | Type       | Null | Key | Default           | Extra                                           |
+--------------+------------+------+-----+-------------------+-------------------------------------------------+
| id           | int        | NO   |     | NULL              |                                                 |
| name         | text       | NO   |     | NULL              |                                                 |
| description  | text       | NO   |     | NULL              |                                                 |
| supplier_id  | int        | NO   |     | NULL              |                                                 |
| cost         | float      | NO   |     | 0                 |                                                 |
| status       | tinyint(1) | NO   |     | 1                 |                                                 |
| date_created | datetime   | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                               |
| date_updated | datetime   | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP   |
+--------------+------------+------+-----+-------------------+-------------------------------------------------+
8 rows in set (0.00 sec)
```

```
PES1UG21CS480> INSERT INTO `item_list` (`id`, `name`, `description`, `supplier_id`, `cost`, `status`, `date_created`, `date_updated`)
 VALUES
    -> (1, 'Item 101', 'Sample Only', 1, 150, 1, '2021-11-02 10:01:55', '2021-11-02 10:01:55'),
    -> (2, 'Item 102', 'Sample only', 2, 200, 1, '2021-11-02 10:02:12', '2021-11-02 10:02:12'),
    -> (3, 'Item 103', 'Sample', 1, 185, 1, '2021-11-02 10:02:27', '2021-11-02 10:02:27'),
    -> (4, 'Item 104', 'Sample only', 2, 205, 1, '2021-11-02 10:02:47', '2021-11-02 10:02:47');
Query OK, 4 rows affected (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 0

PES1UG21CS480> select * from item_list;
+----+----------+-------------+-------------+------+--------+---------------------+---------------------+
| id | name     | description | supplier_id | cost | status | date_created        | date_updated        |
+----+----------+-------------+-------------+------+--------+---------------------+---------------------+
|  1 | Item 101 | Sample Only |           1 |  150 |      1 | 2021-11-02 10:01:55 | 2021-11-02 10:01:55 |
|  2 | Item 102 | Sample only |           2 |  200 |      1 | 2021-11-02 10:02:12 | 2021-11-02 10:02:12 |
|  3 | Item 103 | Sample      |           1 |  185 |      1 | 2021-11-02 10:02:27 | 2021-11-02 10:02:27 |
|  4 | Item 104 | Sample only |           2 |  205 |      1 | 2021-11-02 10:02:47 | 2021-11-02 10:02:47 |
+----+----------+-------------+-------------+------+--------+---------------------+---------------------+
4 rows in set (0.00 sec)

PES1UG21CS480>
```

Po_items

```
PES1UG21CS480> CREATE TABLE `po_items` (
    ->    `po_id` int(30) NOT NULL,
    ->    `item_id` int(30) NOT NULL,
    ->    `quantity` int(30) NOT NULL,
    ->    `price` float NOT NULL DEFAULT 0,
    ->    `unit` varchar(50) NOT NULL,
    ->    `total` float NOT NULL DEFAULT 0
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 3 warnings (0.03 sec)

PES1UG21CS480> desc po_items;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| po_id    | int         | NO   |     | NULL    |       |
| item_id  | int         | NO   |     | NULL    |       |
| quantity | int         | NO   |     | NULL    |       |
| price    | float       | NO   |     | 0       |       |
| unit     | varchar(50) | NO   |     | NULL    |       |
| total    | float       | NO   |     | 0       |       |
+----------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

```
PES1UG21CS480> INSERT INTO `po_items` (`po_id`, `item_id`, `quantity`, `price`, `unit`, `total`) VALUES
    -> (1, 1, 500, 150, 'pcs', 75000),
    -> (2, 2, 300, 200, 'Boxes', 60000),
    -> (2, 4, 200, 205, 'pcs', 41000);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
PES1UG21CS480> select * from po_items;
+-------+---------+----------+-------+-------+-------+
| po_id | item_id | quantity | price | unit  | total |
+-------+---------+----------+-------+-------+-------+
|     1 |       1 |      500 |   150 | pcs   | 75000 |
|     2 |       2 |      300 |   200 | Boxes | 60000 |
|     2 |       4 |      200 |   205 | pcs   | 41000 |
+-------+---------+----------+-------+-------+-------+
3 rows in set (0.00 sec)
```

Purchase_order_list

```
PES1UG21CS480> CREATE TABLE `purchase_order_list` (
    -> `id` int(30) NOT NULL,
    -> `po_code` varchar(50) NOT NULL,
    -> `supplier_id` int(30) NOT NULL,
    -> `amount` float NOT NULL,
    -> `discount_perc` float NOT NULL DEFAULT 0,
    -> `discount` float NOT NULL DEFAULT 0,
    -> `tax_perc` float NOT NULL DEFAULT 0,
    -> `tax` float NOT NULL DEFAULT 0,
    -> `remarks` text NOT NULL,
    -> `status` tinyint(4) NOT NULL DEFAULT 0 COMMENT '0 = pending, 1 = partially received, 2 =received',
    -> `date_created` datetime NOT NULL DEFAULT current_timestamp(),
    -> `date_updated` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 3 warnings (0.03 sec)

PES1UG21CS480> desc purchase_order_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   |     | NULL              |                                               |
| po_code       | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   |     | NULL              |                                               |
| amount        | float       | NO   |     | NULL              |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| remarks       | text        | NO   |     | NULL              |                                               |
| status        | tinyint     | NO   |     | 0                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
12 rows in set (0.01 sec)
```

```
PES1UG21CS480> INSERT INTO `purchase_order_list` (`id`, `po_code`, `supplier_id`, `amount`, `discount_perc`, `discount`, `tax_perc`,
`tax`, `remarks`, `status`, `date_created`, `date_updated`) VALUES
    -> (1, 'PO-0001', 1, 81480, 3, 2250, 12, 8730, 'Sample', 2, '2021-11-03 11:20:22', '2021-11-03 11:21:00'),
    -> (2, 'PO-0002', 5, 107464, 5, 5050, 12, 11514, 'Sample PO Only', 2, '2021-11-03 11:50:50', '2021-11-03 11:52:15');
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

PES1UG21CS480> select * from purchase_order_list;
+----+---------+-------------+--------+---------------+----------+----------+-------+----------------+--------+---------------------+
---------------------+
| id | po_code | supplier_id | amount | discount_perc | discount | tax_perc | tax   | remarks        | status | date_created        |
 date_updated        |
+----+---------+-------------+--------+---------------+----------+----------+-------+----------------+--------+---------------------+
---------------------+
|  1 | PO-0001 |           1 |  81480 |             3 |     2250 |       12 |  8730 | Sample         |      2 | 2021-11-03 11:20:22 |
 2021-11-03 11:21:00 |
|  2 | PO-0002 |           2 | 107464 |             5 |     5050 |       12 | 11514 | Sample PO Only |      2 | 2021-11-03 11:50:50 |
 2021-11-03 11:52:15 |
+----+---------+-------------+--------+---------------+----------+----------+-------+----------------+--------+---------------------+
---------------------+
2 rows in set (0.00 sec)

PES1UG21CS480>
```

Receiving_order

```
PES1UG21CS480> CREATE TABLE `receiving_list` (
    -> `id` int(30) NOT NULL,
    -> `from_id` int(30) NOT NULL,
    -> `from_order` tinyint(1) NOT NULL DEFAULT 1 COMMENT '1=PO ,2 = BO',
    -> `amount` float NOT NULL DEFAULT 0,
    -> `discount_perc` float NOT NULL DEFAULT 0,
    -> `discount` float NOT NULL DEFAULT 0,
    -> `tax_perc` float NOT NULL DEFAULT 0,
    -> `tax` float NOT NULL DEFAULT 0,
    -> `stock_ids` text DEFAULT NULL,
    -> `remarks` text DEFAULT NULL,
    -> `date_created` datetime NOT NULL DEFAULT current_timestamp(),
    -> `date_updated` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 3 warnings (0.03 sec)

PES1UG21CS480> desc receiving_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   |     | NULL              |                                               |
| from_id       | int         | NO   |     | NULL              |                                               |
| from_order    | tinyint(1)  | NO   |     | 1                 |                                               |
| amount        | float       | NO   |     | 0                 |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| stock_ids     | text        | YES  |     | NULL              |                                               |
| remarks       | text        | YES  |     | NULL              |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
12 rows in set (0.00 sec)
```

```
PES1UG21CS480> INSERT INTO `receiving_list` (`id`, `from_id`, `from_order`, `amount`, `discount_perc`, `discount`, `tax_perc`, `tax`,
`stock_ids`, `remarks`, `date_created`, `date_updated`) VALUES
    -> (1, 1, 1, 40740, 3, 1125, 12, 4365, '1', 'Sample', '2021-11-03 11:20:38', '2021-11-03 11:20:38'),
    -> (2, 1, 2, 20370, 3, 562.5, 12, 2182.5, '2', '', '2021-11-03 11:20:51', '2021-11-03 11:20:51'),
    -> (3, 2, 2, 20370, 3, 562.5, 12, 2182.5, '3', 'Success', '2021-11-03 11:21:00', '2021-11-03 11:21:00'),
    -> (4, 2, 1, 64638, 5, 3037.5, 12, 6925.5, '4,5', 'Sample Receiving (Partial)', '2021-11-03 11:51:41', '2021-11-03 11:51:41'),
    -> (5, 3, 2, 32186, 5, 1512.5, 12, 3448.5, '6,7', 'BO Receive (Partial)', '2021-11-03 11:52:02', '2021-11-03 11:52:02'),
    -> (6, 4, 2, 10640, 5, 500, 12, 1140, '8', 'Sample Success', '2021-11-03 11:52:15', '2021-11-03 11:52:15');
Query OK, 6 rows affected (0.01 sec)
Records: 6  Duplicates: 0  Warnings: 0

PES1UG21CS480> select * from receiving_list;
+----+---------+------------+--------+---------------+----------+----------+--------+-----------+----------------------------+---------------------+---------------------+
| id | from_id | from_order | amount | discount_perc | discount | tax_perc | tax    | stock_ids | remarks                    | date_created        | date_updated        |
+----+---------+------------+--------+---------------+----------+----------+--------+-----------+----------------------------+---------------------+---------------------+
|  1 |       1 |          1 |  40740 |             3 |     1125 |       12 |   4365 | 1         | Sample                     | 2021-11-03 11:20:38 | 2021-11-03 11:20:38 |
|  2 |       1 |          2 |  20370 |             3 |    562.5 |       12 | 2182.5 | 2         |                            | 2021-11-03 11:20:51 | 2021-11-03 11:20:51 |
|  3 |       2 |          2 |  20370 |             3 |    562.5 |       12 | 2182.5 | 3         | Success                    | 2021-11-03 11:21:00 | 2021-11-03 11:21:00 |
|  4 |       2 |          1 |  64638 |             5 |   3037.5 |       12 | 6925.5 | 4,5       | Sample Receiving (Partial) | 2021-11-03 11:51:41 | 2021-11-03 11:51:41 |
|  5 |       3 |          2 |  32186 |             5 |   1512.5 |       12 | 3448.5 | 6,7       | BO Receive (Partial)       | 2021-11-03 11:52:02 | 2021-11-03 11:52:02 |
|  6 |       4 |          2 |  10640 |             5 |      500 |       12 |   1140 | 8         | Sample Success             | 2021-11-03 11:52:15 | 2021-11-03 11:52:15 |
+----+---------+------------+--------+---------------+----------+----------+--------+-----------+----------------------------+---------------------+---------------------+
6 rows in set (0.00 sec)

PES1UG21CS480>
```

Return_list

```
PES1UG21CS480> CREATE TABLE `return_list` (
    ->    `id` int(30) NOT NULL,
    ->    `return_code` varchar(50) NOT NULL,
    ->    `supplier_id` int(30) NOT NULL,
    ->    `amount` float NOT NULL DEFAULT 0,
    ->    `remarks` text DEFAULT NULL,
    ->    `stock_ids` text NOT NULL,
    ->    `date_created` datetime NOT NULL DEFAULT current_timestamp(),
    ->    `date_updated` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 2 warnings (0.03 sec)

PES1UG21CS480> desc return_list;
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field        | Type        | Null | Key | Default           | Extra                                         |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id           | int         | NO   |     | NULL              |                                               |
| return_code  | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id  | int         | NO   |     | NULL              |                                               |
| amount       | float       | NO   |     | 0                 |                                               |
| remarks      | text        | YES  |     | NULL              |                                               |
| stock_ids    | text        | NO   |     | NULL              |                                               |
| date_created | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> INSERT INTO `return_list` (`id`, `return_code`, `supplier_id`, `amount`, `remarks`, `stock_ids`, `date_created`, `date
_updated`) VALUES
    -> (1, 'R-0001', 2, 3025, 'Sample Issue', '16,17', '2021-11-03 13:45:53', '2021-11-03 13:45:53');
Query OK, 1 row affected (0.01 sec)

PES1UG21CS480> select * from return_list;
+----+-------------+-------------+--------+--------------+-----------+---------------------+---------------------+
| id | return_code | supplier_id | amount | remarks      | stock_ids | date_created        | date_updated        |
+----+-------------+-------------+--------+--------------+-----------+---------------------+---------------------+
|  1 | R-0001      |           2 |   3025 | Sample Issue | 16,17     | 2021-11-03 13:45:53 | 2021-11-03 13:45:53 |
+----+-------------+-------------+--------+--------------+-----------+---------------------+---------------------+
1 row in set (0.00 sec)

PES1UG21CS480>
```

Sales_list

```
PES1UG21CS480> CREATE TABLE `sales_list` (
    ->   `id` int(30) NOT NULL,
    ->   `sales_code` varchar(50) NOT NULL,
    ->   `client` text DEFAULT NULL,
    ->   `amount` float NOT NULL DEFAULT 0,
    ->   `remarks` text DEFAULT NULL,
    ->   `stock_ids` text NOT NULL,
    ->   `date_created` datetime NOT NULL DEFAULT current_timestamp(),
    ->   `date_updated` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 1 warning (0.03 sec)

PES1UG21CS480> desc sales_list;
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field        | Type        | Null | Key | Default           | Extra                                         |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id           | int         | NO   |     | NULL              |                                               |
| sales_code   | varchar(50) | NO   |     | NULL              |                                               |
| client       | text        | YES  |     | NULL              |                                               |
| amount       | float       | NO   |     | 0                 |                                               |
| remarks      | text        | YES  |     | NULL              |                                               |
| stock_ids    | text        | NO   |     | NULL              |                                               |
| date_created | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> INSERT INTO `sales_list` (`id`, `sales_code`, `client`, `amount`, `remarks`, `stock_ids`, `date_created`, `date_update
d`) VALUES
    -> (1, 'SALE-0001', 'John Smith', 7625, 'Sample Remarks', '24,25,26', '2021-11-03 14:03:30', '2021-11-03 14:08:27');
Query OK, 1 row affected (0.01 sec)

PES1UG21CS480> select * from sales_list;
+----+------------+------------+--------+----------------+-----------+---------------------+---------------------+
| id | sales_code | client     | amount | remarks        | stock_ids | date_created        | date_updated        |
+----+------------+------------+--------+----------------+-----------+---------------------+---------------------+
|  1 | SALE-0001  | John Smith |   7625 | Sample Remarks | 24,25,26  | 2021-11-03 14:03:30 | 2021-11-03 14:08:27 |
+----+------------+------------+--------+----------------+-----------+---------------------+---------------------+
1 row in set (0.00 sec)

PES1UG21CS480>
```

Stock_list

```
PES1UG21CS480> CREATE TABLE `stock_list` (
    ->      `id` int(30) NOT NULL,
    ->      `item_id` int(30) NOT NULL,
    ->      `quantity` int(30) NOT NULL,
    ->      `unit` varchar(250) DEFAULT NULL,
    ->      `price` float NOT NULL DEFAULT 0,
    ->      `type` tinyint(1) NOT NULL DEFAULT 1 COMMENT '1=IN , 2=OUT',
    ->      `date_created` datetime NOT NULL DEFAULT current_timestamp(),
    ->      `total` float GENERATED ALWAYS AS (quantity * price) STORED,
    ->      PRIMARY KEY (`id`)
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 4 warnings (0.02 sec)

PES1UG21CS480> desc stock_list;
+--------------+--------------+------+-----+-------------------+-------------------+
| Field        | Type         | Null | Key | Default           | Extra             |
+--------------+--------------+------+-----+-------------------+-------------------+
| id           | int          | NO   | PRI | NULL              |                   |
| item_id      | int          | NO   |     | NULL              |                   |
| quantity     | int          | NO   |     | NULL              |                   |
| unit         | varchar(250) | YES  |     | NULL              |                   |
| price        | float        | NO   |     | 0                 |                   |
| type         | tinyint(1)   | NO   |     | 1                 |                   |
| date_created | datetime     | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| total        | float        | YES  |     | NULL              | STORED GENERATED  |
+--------------+--------------+------+-----+-------------------+-------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> INSERT INTO `stock_list` (`id`, `item_id`, `quantity`, `unit`, `price`, `type`, `date_created`) VALUES
    -> (1, 1, 250, 'pcs', 150, 1, '2021-11-03 11:20:38'),
    -> (2, 1, 125, 'pcs', 150, 1, '2021-11-03 11:20:51'),
    -> (3, 1, 125, 'pcs', 150, 1, '2021-11-03 11:21:00'),
    -> (4, 2, 150, 'Boxes', 200, 1, '2021-11-03 11:51:41'),
    -> (5, 4, 150, 'pcs', 205, 1, '2021-11-03 11:51:41'),
    -> (6, 2, 100, 'Boxes', 200, 1, '2021-11-03 11:52:02'),
    -> (7, 4, 50, 'pcs', 205, 1, '2021-11-03 11:52:02'),
    -> (8, 2, 50, 'Boxes', 200, 1, '2021-11-03 11:52:15'),
    -> (16, 2, 10, 'pcs', 200, 2, '2021-11-03 13:45:53'),
    -> (17, 4, 5, 'boxes', 205, 2, '2021-11-03 13:45:53'),
    -> (24, 1, 10, 'pcs', 150, 2, '2021-11-03 14:08:27'),
    -> (25, 2, 5, 'pcs', 200, 2, '2021-11-03 14:08:27'),
    -> (26, 4, 25, 'boxes', 205, 2, '2021-11-03 14:08:27');
Query OK, 13 rows affected (0.00 sec)
Records: 13  Duplicates: 0  Warnings: 0
```

```
PES1UG21CS480> select * from stock_list;
+----+---------+----------+--------+-------+------+---------------------+--------+
| id | item_id | quantity | unit   | price | type | date_created        | total  |
+----+---------+----------+--------+-------+------+---------------------+--------+
|  1 |       1 |      250 | pcs    |   150 |    1 | 2021-11-03 11:20:38 |  37500 |
|  2 |       1 |      125 | pcs    |   150 |    1 | 2021-11-03 11:20:51 |  18750 |
|  3 |       1 |      125 | pcs    |   150 |    1 | 2021-11-03 11:21:00 |  18750 |
|  4 |       2 |      150 | Boxes  |   200 |    1 | 2021-11-03 11:51:41 |  30000 |
|  5 |       4 |      150 | pcs    |   205 |    1 | 2021-11-03 11:51:41 |  30750 |
|  6 |       2 |      100 | Boxes  |   200 |    1 | 2021-11-03 11:52:02 |  20000 |
|  7 |       4 |       50 | pcs    |   205 |    1 | 2021-11-03 11:52:02 |  10250 |
|  8 |       2 |       50 | Boxes  |   200 |    1 | 2021-11-03 11:52:15 |  10000 |
| 16 |       2 |       10 | pcs    |   200 |    2 | 2021-11-03 13:45:53 |   2000 |
| 17 |       4 |        5 | boxes  |   205 |    2 | 2021-11-03 13:45:53 |   1025 |
| 24 |       1 |       10 | pcs    |   150 |    2 | 2021-11-03 14:08:27 |   1500 |
| 25 |       2 |        5 | pcs    |   200 |    2 | 2021-11-03 14:08:27 |   1000 |
| 26 |       4 |       25 | boxes  |   205 |    2 | 2021-11-03 14:08:27 |   5125 |
+----+---------+----------+--------+-------+------+---------------------+--------+
13 rows in set (0.00 sec)

PES1UG21CS480> |
```

Supplier_list

```
PES1UG21CS480> CREATE TABLE `supplier_list` (
    ->    `id` int(30) NOT NULL,
    ->    `name` text NOT NULL,
    ->    `address` text NOT NULL,
    ->    `cperson` text NOT NULL,
    ->    `contact` text NOT NULL,
    ->    `status` tinyint(1) NOT NULL DEFAULT 1,
    ->    `date_created` datetime NOT NULL DEFAULT current_timestamp(),
    ->    `date_updated` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 2 warnings (0.02 sec)

PES1UG21CS480> desc supplier_list;
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field        | Type        | Null | Key | Default           | Extra                                         |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id           | int         | NO   |     | NULL              |                                               |
| name         | text        | NO   |     | NULL              |                                               |
| address      | text        | NO   |     | NULL              |                                               |
| cperson      | text        | NO   |     | NULL              |                                               |
| contact      | text        | NO   |     | NULL              |                                               |
| status       | tinyint(1)  | NO   |     | 1                 |                                               |
| date_created | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.01 sec)
```

```
PES1UG21CS480> INSERT INTO `supplier_list` (`id`, `name`, `address`, `cperson`, `contact`, `status`, `date_created`, `date_updated`)
VALUES
    -> (1, 'Supplier 101', 'Sample Supplier Address 101', 'Supplier Staff 101', '09123456789', 1, '2021-11-02 09:36:19', '2021-11-02
09:36:19'),
    -> (2, 'Supplier 102', 'Sample Address 102', 'Supplier Staff 102', '0987654332', 1, '2021-11-02 09:36:54', '2021-11-02 09:36:54')
;
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

PES1UG21CS480> select * from supplier_list;
+----+--------------+-----------------------------+--------------------+-------------+--------+---------------------+---------------------+
| id | name         | address                     | cperson            | contact     | status | date_created        | date_updated        |
+----+--------------+-----------------------------+--------------------+-------------+--------+---------------------+---------------------+
|  1 | Supplier 101 | Sample Supplier Address 101 | Supplier Staff 101 | 09123456789 |      1 | 2021-11-02 09:36:19 | 2021-11-02 09:36:19 |
|  2 | Supplier 102 | Sample Address 102          | Supplier Staff 102 | 0987654332  |      1 | 2021-11-02 09:36:54 | 2021-11-02 09:36:54 |
+----+--------------+-----------------------------+--------------------+-------------+--------+---------------------+---------------------+
2 rows in set (0.00 sec)

PES1UG21CS480>
```

System_info

```
PES1UG21CS480> CREATE TABLE `system_info` (
    ->    `id` int(30) NOT NULL,
    ->    `meta_field` text NOT NULL,
    ->    `meta_value` text NOT NULL
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 1 warning (0.03 sec)

PES1UG21CS480> desc system_info;
+------------+------+------+-----+---------+-------+
| Field      | Type | Null | Key | Default | Extra |
+------------+------+------+-----+---------+-------+
| id         | int  | NO   |     | NULL    |       |
| meta_field | text | NO   |     | NULL    |       |
| meta_value | text | NO   |     | NULL    |       |
+------------+------+------+-----+---------+-------+
3 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> INSERT INTO `system_info` (`id`, `meta_field`, `meta_value`) VALUES
    -> (1, 'name', 'Stock Management System - PHP'),
    -> (6, 'short_name', 'SMS- PHP'),
    -> (11, 'logo', 'uploads/logo-1635816671.png'),
    -> (13, 'user_avatar', 'uploads/user_avatar.jpg'),
    -> (14, 'cover', 'uploads/cover-1635816671.png'),
    -> (15, 'content', 'Array');
Query OK, 6 rows affected (0.01 sec)
Records: 6  Duplicates: 0  Warnings: 0

PES1UG21CS480> select * from system_info;
+----+-------------+------------------------------+
| id | meta_field  | meta_value                   |
+----+-------------+------------------------------+
|  1 | name        | Stock Management System - PHP |
|  6 | short_name  | SMS- PHP                     |
| 11 | logo        | uploads/logo-1635816671.png  |
| 13 | user_avatar | uploads/user_avatar.jpg      |
| 14 | cover       | uploads/cover-1635816671.png |
| 15 | content     | Array                        |
+----+-------------+------------------------------+
6 rows in set (0.00 sec)

PES1UG21CS480>
```

Users

```
PES1UG21CS480> CREATE TABLE `users` (
    -> `id` int(50) NOT NULL,
    -> `firstname` varchar(250) NOT NULL,
    -> `middlename` text DEFAULT NULL,
    -> `lastname` varchar(250) NOT NULL,
    -> `username` text NOT NULL,
    -> `password` text NOT NULL,
    -> `avatar` text DEFAULT NULL,
    -> `last_login` datetime DEFAULT NULL,
    -> `type` tinyint(1) NOT NULL DEFAULT 0,
    -> `date_added` datetime NOT NULL DEFAULT current_timestamp(),
    -> `date_updated` datetime DEFAULT NULL ON UPDATE current_timestamp()
    -> ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
Query OK, 0 rows affected, 2 warnings (0.03 sec)

PES1UG21CS480> desc users;
+--------------+--------------+------+-----+-------------------+-----------------------------+
| Field        | Type         | Null | Key | Default           | Extra                       |
+--------------+--------------+------+-----+-------------------+-----------------------------+
| id           | int          | NO   |     | NULL              |                             |
| firstname    | varchar(250) | NO   |     | NULL              |                             |
| middlename   | text         | YES  |     | NULL              |                             |
| lastname     | varchar(250) | NO   |     | NULL              |                             |
| username     | text         | NO   |     | NULL              |                             |
| password     | text         | NO   |     | NULL              |                             |
| avatar       | text         | YES  |     | NULL              |                             |
| last_login   | datetime     | YES  |     | NULL              |                             |
| type         | tinyint(1)   | NO   |     | 0                 |                             |
| date_added   | datetime     | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED           |
| date_updated | datetime     | YES  |     | NULL              | on update CURRENT_TIMESTAMP |
+--------------+--------------+------+-----+-------------------+-----------------------------+
11 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> INSERT INTO `users` (`id`, `firstname`, `middlename`, `lastname`, `username`, `password`, `avatar`, `last_login`, `typ
e`, `date_added`, `date_updated`) VALUES
    -> (1, 'Administrator', NULL, 'Admin', 'admin', '0192023a7bbd73250516f069df18b500', 'uploads/avatar-1.png?v=1635556826', NULL, 1,
'2021-01-20 14:02:37', '2021-10-30 09:20:26'),
    -> (10, 'John', NULL, 'Smith', 'jsmith', '39ce7e2a8573b41ce73b5ba41617f8f7', 'uploads/avatar-10.png?v=1635920488', NULL, 2, '2021
-11-03 14:21:28', '2021-11-03 14:21:28'),
    -> (11, 'Claire', NULL, 'Blake', 'cblake', 'cd74fae0a3adf459f73bbf187607ccea', 'uploads/avatar-11.png?v=1635920566', NULL, 1, '20
21-11-03 14:22:46', '2021-11-03 14:22:46');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

PES1UG21CS480> select * from users;
+----+--------------+------------+----------+----------+----------------------------------+-------------------------------------+------
-------+------+---------------------+---------------------+
| id | firstname    | middlename | lastname | username | password                         | avatar                              | last
_login | type | date_added          | date_updated        |
+----+--------------+------------+----------+----------+----------------------------------+-------------------------------------+------
-------+------+---------------------+---------------------+
|  1 | Administrator | NULL      | Admin    | admin    | 0192023a7bbd73250516f069df18b500 | uploads/avatar-1.png?v=1635556826   | NULL
       |    1 | 2021-01-20 14:02:37 | 2021-10-30 09:20:26 |
| 10 | John         | NULL       | Smith    | jsmith   | 39ce7e2a8573b41ce73b5ba41617f8f7 | uploads/avatar-10.png?v=1635920488  | NULL
       |    2 | 2021-11-03 14:21:28 | 2021-11-03 14:21:28 |
| 11 | Claire       | NULL       | Blake    | cblake   | cd74fae0a3adf459f73bbf187607ccea | uploads/avatar-11.png?v=1635920566  | NULL
       |    1 | 2021-11-03 14:22:46 | 2021-11-03 14:22:46 |
+----+--------------+------------+----------+----------+----------------------------------+-------------------------------------+------
-------+------+---------------------+---------------------+
3 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `back_order_list`
    ->    ADD PRIMARY KEY (`id`),
    ->    ADD KEY `supplier_id` (`supplier_id`),
    ->    ADD KEY `po_id` (`po_id`),
    ->    ADD KEY `receiving_id` (`receiving_id`);
Query OK, 0 rows affected (0.11 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc back_order_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              |                                               |
| receiving_id  | int         | NO   | MUL | NULL              |                                               |
| po_id         | int         | NO   | MUL | NULL              |                                               |
| bo_code       | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   | MUL | NULL              |                                               |
| amount        | float       | NO   |     | NULL              |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| remarks       | text        | YES  |     | NULL              |                                               |
| status        | tinyint     | NO   |     | 0                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
14 rows in set (0.00 sec)
```

```
PES1UG21CS480> ALTER TABLE `bo_items`
    ->    ADD KEY `item_id` (`item_id`),
    ->    ADD KEY `bo_id` (`bo_id`);
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc bo_items;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| bo_id    | int         | NO   | MUL | NULL    |       |
| item_id  | int         | NO   | MUL | NULL    |       |
| quantity | int         | NO   |     | NULL    |       |
| price    | float       | NO   |     | 0       |       |
| unit     | varchar(50) | NO   |     | NULL    |       |
| total    | float       | NO   |     | 0       |       |
+----------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `item_list`
    ->   ADD PRIMARY KEY (`id`),
    ->   ADD KEY `supplier_id` (`supplier_id`);
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc item_list;
+--------------+------------+------+-----+-------------------+-----------------------------------------------+
| Field        | Type       | Null | Key | Default           | Extra                                         |
+--------------+------------+------+-----+-------------------+-----------------------------------------------+
| id           | int        | NO   | PRI | NULL              |                                               |
| name         | text       | NO   |     | NULL              |                                               |
| description  | text       | NO   |     | NULL              |                                               |
| supplier_id  | int        | NO   | MUL | NULL              |                                               |
| cost         | float      | NO   |     | 0                 |                                               |
| status       | tinyint(1) | NO   |     | 1                 |                                               |
| date_created | datetime   | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated | datetime   | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+--------------+------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `po_items`
    ->    ADD KEY `po_id` (`po_id`),
    ->    ADD KEY `item_id` (`item_id`);
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc po_items;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| po_id    | int         | NO   | MUL | NULL    |       |
| item_id  | int         | NO   | MUL | NULL    |       |
| quantity | int         | NO   |     | NULL    |       |
| price    | float       | NO   |     | 0       |       |
| unit     | varchar(50) | NO   |     | NULL    |       |
| total    | float       | NO   |     | 0       |       |
+----------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `purchase_order_list`
    ->    ADD PRIMARY KEY (`id`),
    ->    ADD KEY `supplier_id` (`supplier_id`);
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc purchase_order_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              |                                               |
| po_code       | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   | MUL | NULL              |                                               |
| amount        | float       | NO   |     | NULL              |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| remarks       | text        | NO   |     | NULL              |                                               |
| status        | tinyint     | NO   |     | 0                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
12 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `receiving_list`
    ->    ADD PRIMARY KEY (`id`);
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc receiving_list;
+----------------+-------------+------+-----+-------------------+-------------------------------------------------+
| Field          | Type        | Null | Key | Default           | Extra                                           |
+----------------+-------------+------+-----+-------------------+-------------------------------------------------+
| id             | int         | NO   | PRI | NULL              |                                                 |
| from_id        | int         | NO   |     | NULL              |                                                 |
| from_order     | tinyint(1)  | NO   |     | 1                 |                                                 |
| amount         | float       | NO   |     | 0                 |                                                 |
| discount_perc  | float       | NO   |     | 0                 |                                                 |
| discount       | float       | NO   |     | 0                 |                                                 |
| tax_perc       | float       | NO   |     | 0                 |                                                 |
| tax            | float       | NO   |     | 0                 |                                                 |
| stock_ids      | text        | YES  |     | NULL              |                                                 |
| remarks        | text        | YES  |     | NULL              |                                                 |
| date_created   | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                               |
| date_updated   | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP  |
+----------------+-------------+------+-----+-------------------+-------------------------------------------------+
12 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `return_list`
    ->    ADD PRIMARY KEY (`id`),
    ->    ADD KEY `supplier_id` (`supplier_id`);
Query OK, 0 rows affected (0.05 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc return_list;
+----------------+-------------+------+-----+-------------------+-------------------------------------------------+
| Field          | Type        | Null | Key | Default           | Extra                                           |
+----------------+-------------+------+-----+-------------------+-------------------------------------------------+
| id             | int         | NO   | PRI | NULL              |                                                 |
| return_code    | varchar(50) | NO   |     | NULL              |                                                 |
| supplier_id    | int         | NO   | MUL | NULL              |                                                 |
| amount         | float       | NO   |     | 0                 |                                                 |
| remarks        | text        | YES  |     | NULL              |                                                 |
| stock_ids      | text        | NO   |     | NULL              |                                                 |
| date_created   | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                               |
| date_updated   | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP  |
+----------------+-------------+------+-----+-------------------+-------------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `sales_list`
    ->   ADD PRIMARY KEY (`id`);
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc sales_list;
+--------------+-------------+------+-----+-------------------+------------------------------------------------+
| Field        | Type        | Null | Key | Default           | Extra                                          |
+--------------+-------------+------+-----+-------------------+------------------------------------------------+
| id           | int         | NO   | PRI | NULL              |                                                |
| sales_code   | varchar(50) | NO   |     | NULL              |                                                |
| client       | text        | YES  |     | NULL              |                                                |
| amount       | float       | NO   |     | 0                 |                                                |
| remarks      | text        | YES  |     | NULL              |                                                |
| stock_ids    | text        | NO   |     | NULL              |                                                |
| date_created | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                              |
| date_updated | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP  |
+--------------+-------------+------+-----+-------------------+------------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `stock_list`
    ->   ADD PRIMARY KEY (`id`),
    ->   ADD KEY `item_id` (`item_id`);
ERROR 1068 (42000): Multiple primary key defined
PES1UG21CS480> desc stock_list;
+--------------+-------------+------+-----+-------------------+-------------------+
| Field        | Type        | Null | Key | Default           | Extra             |
+--------------+-------------+------+-----+-------------------+-------------------+
| id           | int         | NO   | PRI | NULL              |                   |
| item_id      | int         | NO   |     | NULL              |                   |
| quantity     | int         | NO   |     | NULL              |                   |
| unit         | varchar(250)| YES  |     | NULL              |                   |
| price        | float       | NO   |     | 0                 |                   |
| type         | tinyint(1)  | NO   |     | 1                 |                   |
| date_created | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| total        | float       | YES  |     | NULL              | STORED GENERATED  |
+--------------+-------------+------+-----+-------------------+-------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `supplier_list`
    ->   ADD PRIMARY KEY (`id`);
Query OK, 0 rows affected (0.05 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc supplier_list;
+--------------+-------------+------+-----+-------------------+------------------------------------------------+
| Field        | Type        | Null | Key | Default           | Extra                                          |
+--------------+-------------+------+-----+-------------------+------------------------------------------------+
| id           | int         | NO   | PRI | NULL              |                                                |
| name         | text        | NO   |     | NULL              |                                                |
| address      | text        | NO   |     | NULL              |                                                |
| cperson      | text        | NO   |     | NULL              |                                                |
| contact      | text        | NO   |     | NULL              |                                                |
| status       | tinyint(1)  | NO   |     | 1                 |                                                |
| date_created | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                              |
| date_updated | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP  |
+--------------+-------------+------+-----+-------------------+------------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `system_info`
    ->    ADD PRIMARY KEY (`id`);
Query OK, 0 rows affected (0.05 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc system_info;
+------------+------+------+-----+---------+-------+
| Field      | Type | Null | Key | Default | Extra |
+------------+------+------+-----+---------+-------+
| id         | int  | NO   | PRI | NULL    |       |
| meta_field | text | NO   |     | NULL    |       |
| meta_value | text | NO   |     | NULL    |       |
+------------+------+------+-----+---------+-------+
3 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `users`
    ->    ADD PRIMARY KEY (`id`);
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc users;
+--------------+--------------+------+-----+-------------------+-----------------------------+
| Field        | Type         | Null | Key | Default           | Extra                       |
+--------------+--------------+------+-----+-------------------+-----------------------------+
| id           | int          | NO   | PRI | NULL              |                             |
| firstname    | varchar(250) | NO   |     | NULL              |                             |
| middlename   | text         | YES  |     | NULL              |                             |
| lastname     | varchar(250) | NO   |     | NULL              |                             |
| username     | text         | NO   |     | NULL              |                             |
| password     | text         | NO   |     | NULL              |                             |
| avatar       | text         | YES  |     | NULL              |                             |
| last_login   | datetime     | YES  |     | NULL              |                             |
| type         | tinyint(1)   | NO   |     | 0                 |                             |
| date_added   | datetime     | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED           |
| date_updated | datetime     | YES  |     | NULL              | on update CURRENT_TIMESTAMP |
+--------------+--------------+------+-----+-------------------+-----------------------------+
11 rows in set (0.00 sec)
```

```
PES1UG21CS480> ALTER TABLE `user_meta`
    ->    ADD KEY `user_id` (`user_id`);
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

PES1UG21CS480>
PES1UG21CS480> desc user_meta;
+--------------+----------+------+-----+-------------------+-------------------+
| Field        | Type     | Null | Key | Default           | Extra             |
+--------------+----------+------+-----+-------------------+-------------------+
| user_id      | int      | NO   | MUL | NULL              |                   |
| meta_field   | text     | NO   |     | NULL              |                   |
| meta_value   | text     | NO   |     | NULL              |                   |
| date_created | datetime | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
+--------------+----------+------+-----+-------------------+-------------------+
4 rows in set (0.00 sec)
```

```
PES1UG21CS480> ALTER TABLE `back_order_list`
    ->   MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=5;
Query OK, 4 rows affected, 1 warning (0.06 sec)
Records: 4  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc back_order_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              | auto_increment                                |
| receiving_id  | int         | NO   | MUL | NULL              |                                               |
| po_id         | int         | NO   | MUL | NULL              |                                               |
| bo_code       | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   | MUL | NULL              |                                               |
| amount        | float       | NO   |     | NULL              |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| remarks       | text        | YES  |     | NULL              |                                               |
| status        | tinyint     | NO   |     | 0                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
14 rows in set (0.00 sec)


PES1UG21CS480> ALTER TABLE `item_list`
    ->   MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=6;
Query OK, 4 rows affected, 1 warning (0.06 sec)
Records: 4  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc item_list;
+---------------+------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type       | Null | Key | Default           | Extra                                         |
+---------------+------------+------+-----+-------------------+-----------------------------------------------+
| id            | int        | NO   | PRI | NULL              | auto_increment                                |
| name          | text       | NO   |     | NULL              |                                               |
| description   | text       | NO   |     | NULL              |                                               |
| supplier_id   | int        | NO   | MUL | NULL              |                                               |
| cost          | float      | NO   |     | 0                 |                                               |
| status        | tinyint(1) | NO   |     | 1                 |                                               |
| date_created  | datetime   | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime   | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)
```

```
PES1UG21CS480> ALTER TABLE `purchase_order_list`
    ->   MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;
Query OK, 2 rows affected, 1 warning (0.06 sec)
Records: 2  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc purchase_order_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              | auto_increment                                |
| po_code       | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   | MUL | NULL              |                                               |
| amount        | float       | NO   |     | NULL              |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| remarks       | text        | NO   |     | NULL              |                                               |
| status        | tinyint     | NO   |     | 0                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
12 rows in set (0.00 sec)
```

```
PES1UG21CS480> ALTER TABLE `receiving_list`
    ->   MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=7;
Query OK, 6 rows affected, 1 warning (0.05 sec)
Records: 6  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc receiving_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              | auto_increment                                |
| from_id       | int         | NO   |     | NULL              |                                               |
| from_order    | tinyint(1)  | NO   |     | 1                 |                                               |
| amount        | float       | NO   |     | 0                 |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| stock_ids     | text        | YES  |     | NULL              |                                               |
| remarks       | text        | YES  |     | NULL              |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
12 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `return_list`
    ->   MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;
Query OK, 1 row affected, 1 warning (0.04 sec)
Records: 1  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc return_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              | auto_increment                                |
| return_code   | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   | MUL | NULL              |                                               |
| amount        | float       | NO   |     | 0                 |                                               |
| remarks       | text        | YES  |     | NULL              |                                               |
| stock_ids     | text        | NO   |     | NULL              |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `sales_list`
    ->   MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;
Query OK, 1 row affected, 1 warning (0.04 sec)
Records: 1  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc sales_list;
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field        | Type        | Null | Key | Default           | Extra                                         |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id           | int         | NO   | PRI | NULL              | auto_increment                                |
| sales_code   | varchar(50) | NO   |     | NULL              |                                               |
| client       | text        | YES  |     | NULL              |                                               |
| amount       | float       | NO   |     | 0                 |                                               |
| remarks      | text        | YES  |     | NULL              |                                               |
| stock_ids    | text        | NO   |     | NULL              |                                               |
| date_created | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `stock_list`
    ->   MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=27;
Query OK, 13 rows affected, 1 warning (0.04 sec)
Records: 13  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc stock_list;
+--------------+--------------+------+-----+-------------------+-------------------+
| Field        | Type         | Null | Key | Default           | Extra             |
+--------------+--------------+------+-----+-------------------+-------------------+
| id           | int          | NO   | PRI | NULL              | auto_increment    |
| item_id      | int          | NO   |     | NULL              |                   |
| quantity     | int          | NO   |     | NULL              |                   |
| unit         | varchar(250) | YES  |     | NULL              |                   |
| price        | float        | NO   |     | 0                 |                   |
| type         | tinyint(1)   | NO   |     | 1                 |                   |
| date_created | datetime     | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| total        | float        | YES  |     | NULL              | STORED GENERATED  |
+--------------+--------------+------+-----+-------------------+-------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `supplier_list`
    ->   MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;
Query OK, 2 rows affected, 1 warning (0.04 sec)
Records: 2  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc supplier_list;
+--------------+------------+------+-----+-------------------+-----------------------------------------------+
| Field        | Type       | Null | Key | Default           | Extra                                         |
+--------------+------------+------+-----+-------------------+-----------------------------------------------+
| id           | int        | NO   | PRI | NULL              | auto_increment                                |
| name         | text       | NO   |     | NULL              |                                               |
| address      | text       | NO   |     | NULL              |                                               |
| cperson      | text       | NO   |     | NULL              |                                               |
| contact      | text       | NO   |     | NULL              |                                               |
| status       | tinyint(1) | NO   |     | 1                 |                                               |
| date_created | datetime   | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated | datetime   | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+--------------+------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `system_info`
    ->  MODIFY `id` int(30) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=16;
Query OK, 6 rows affected, 1 warning (0.04 sec)
Records: 6  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc system_info;
+------------+------+------+-----+---------+----------------+
| Field      | Type | Null | Key | Default | Extra          |
+------------+------+------+-----+---------+----------------+
| id         | int  | NO   | PRI | NULL    | auto_increment |
| meta_field | text | NO   |     | NULL    |                |
| meta_value | text | NO   |     | NULL    |                |
+------------+------+------+-----+---------+----------------+
3 rows in set (0.00 sec)


PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `users`
    ->  MODIFY `id` int(50) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=12;
Query OK, 3 rows affected, 1 warning (0.04 sec)
Records: 3  Duplicates: 0  Warnings: 1

PES1UG21CS480> desc users;
+--------------+--------------+------+-----+-------------------+-----------------------------+
| Field        | Type         | Null | Key | Default           | Extra                       |
+--------------+--------------+------+-----+-------------------+-----------------------------+
| id           | int          | NO   | PRI | NULL              | auto_increment              |
| firstname    | varchar(250) | NO   |     | NULL              |                             |
| middlename   | text         | YES  |     | NULL              |                             |
| lastname     | varchar(250) | NO   |     | NULL              |                             |
| username     | text         | NO   |     | NULL              |                             |
| password     | text         | NO   |     | NULL              |                             |
| avatar       | text         | YES  |     | NULL              |                             |
| last_login   | datetime     | YES  |     | NULL              |                             |
| type         | tinyint(1)   | NO   |     | 0                 |                             |
| date_added   | datetime     | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED           |
| date_updated | datetime     | YES  |     | NULL              | on update CURRENT_TIMESTAMP |
+--------------+--------------+------+-----+-------------------+-----------------------------+
11 rows in set (0.00 sec)

PES1UG21CS480>
```

——

```
PES1UG21CS480> ALTER TABLE `back_order_list`
    ->    ADD CONSTRAINT `back_order_list_ibfk_1` FOREIGN KEY (`supplier_id`) REFERENCES `supplier_list` (`id`) ON DELETE CASCADE,
    ->    ADD CONSTRAINT `back_order_list_ibfk_2` FOREIGN KEY (`po_id`) REFERENCES `purchase_order_list` (`id`) ON DELETE CASCADE,
    ->    ADD CONSTRAINT `back_order_list_ibfk_3` FOREIGN KEY (`receiving_id`) REFERENCES `receiving_list` (`id`) ON DELETE CASCADE;
Query OK, 4 rows affected (0.07 sec)
Records: 4  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc back_order_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              | auto_increment                                |
| receiving_id  | int         | NO   | MUL | NULL              |                                               |
| po_id         | int         | NO   | MUL | NULL              |                                               |
| bo_code       | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   | MUL | NULL              |                                               |
| amount        | float       | NO   |     | NULL              |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| remarks       | text        | YES  |     | NULL              |                                               |
| status        | tinyint     | NO   |     | 0                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
14 rows in set (0.00 sec)
```

```
PES1UG21CS480> ALTER TABLE `bo_items`
    ->    ADD CONSTRAINT `bo_items_ibfk_1` FOREIGN KEY (`item_id`) REFERENCES `item_list` (`id`) ON DELETE CASCADE,
    ->    ADD CONSTRAINT `bo_items_ibfk_2` FOREIGN KEY (`bo_id`) REFERENCES `back_order_list` (`id`) ON DELETE CASCADE;
Query OK, 5 rows affected (0.07 sec)
Records: 5  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc bo_items;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| bo_id    | int         | NO   | MUL | NULL    |       |
| item_id  | int         | NO   | MUL | NULL    |       |
| quantity | int         | NO   |     | NULL    |       |
| price    | float       | NO   |     | 0       |       |
| unit     | varchar(50) | NO   |     | NULL    |       |
| total    | float       | NO   |     | 0       |       |
+----------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `item_list`
    ->    ADD CONSTRAINT `item_list_ibfk_1` FOREIGN KEY (`supplier_id`) REFERENCES `supplier_list` (`id`) ON DELETE CASCADE;
Query OK, 4 rows affected (0.05 sec)
Records: 4  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc item_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              | auto_increment                                |
| name          | text        | NO   |     | NULL              |                                               |
| description   | text        | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   | MUL | NULL              |                                               |
| cost          | float       | NO   |     | 0                 |                                               |
| status        | tinyint(1)  | NO   |     | 1                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `po_items`
    ->    ADD CONSTRAINT `po_items_ibfk_1` FOREIGN KEY (`po_id`) REFERENCES `purchase_order_list` (`id`) ON DELETE CASCADE,
    ->    ADD CONSTRAINT `po_items_ibfk_2` FOREIGN KEY (`item_id`) REFERENCES `item_list` (`id`) ON DELETE CASCADE;
Query OK, 3 rows affected (0.06 sec)
Records: 3  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc po_items;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| po_id    | int         | NO   | MUL | NULL    |       |
| item_id  | int         | NO   | MUL | NULL    |       |
| quantity | int         | NO   |     | NULL    |       |
| price    | float       | NO   |     | 0       |       |
| unit     | varchar(50) | NO   |     | NULL    |       |
| total    | float       | NO   |     | 0       |       |
+----------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `purchase_order_list`
    ->    ADD CONSTRAINT `purchase_order_list_ibfk_1` FOREIGN KEY (`supplier_id`) REFERENCES `supplier_list` (`id`) ON DELETE CASCADE;

Query OK, 2 rows affected (0.06 sec)
Records: 2  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc purchase_order_list;
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field         | Type        | Null | Key | Default           | Extra                                         |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id            | int         | NO   | PRI | NULL              | auto_increment                                |
| po_code       | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id   | int         | NO   | MUL | NULL              |                                               |
| amount        | float       | NO   |     | NULL              |                                               |
| discount_perc | float       | NO   |     | 0                 |                                               |
| discount      | float       | NO   |     | 0                 |                                               |
| tax_perc      | float       | NO   |     | 0                 |                                               |
| tax           | float       | NO   |     | 0                 |                                               |
| remarks       | text        | NO   |     | NULL              |                                               |
| status        | tinyint     | NO   |     | 0                 |                                               |
| date_created  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated  | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+---------------+-------------+------+-----+-------------------+-----------------------------------------------+
12 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `return_list`
    ->   ADD CONSTRAINT `return_list_ibfk_1` FOREIGN KEY (`supplier_id`) REFERENCES `supplier_list` (`id`) ON DELETE CASCADE;
Query OK, 1 row affected (0.06 sec)
Records: 1  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc return_list;
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| Field        | Type        | Null | Key | Default           | Extra                                         |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
| id           | int         | NO   | PRI | NULL              | auto_increment                                |
| return_code  | varchar(50) | NO   |     | NULL              |                                               |
| supplier_id  | int         | NO   | MUL | NULL              |                                               |
| amount       | float       | NO   |     | 0                 |                                               |
| remarks      | text        | YES  |     | NULL              |                                               |
| stock_ids    | text        | NO   |     | NULL              |                                               |
| date_created | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED                             |
| date_updated | datetime    | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED on update CURRENT_TIMESTAMP |
+--------------+-------------+------+-----+-------------------+-----------------------------------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```

```
PES1UG21CS480> ALTER TABLE `stock_list`
    ->   ADD CONSTRAINT `stock_list_ibfk_1` FOREIGN KEY (`item_id`) REFERENCES `item_list` (`id`) ON DELETE CASCADE;
Query OK, 13 rows affected (0.05 sec)
Records: 13  Duplicates: 0  Warnings: 0

PES1UG21CS480> desc stock_list;
+--------------+--------------+------+-----+-------------------+-------------------+
| Field        | Type         | Null | Key | Default           | Extra             |
+--------------+--------------+------+-----+-------------------+-------------------+
| id           | int          | NO   | PRI | NULL              | auto_increment    |
| item_id      | int          | NO   | MUL | NULL              |                   |
| quantity     | int          | NO   |     | NULL              |                   |
| unit         | varchar(250) | YES  |     | NULL              |                   |
| price        | float        | NO   |     | 0                 |                   |
| type         | tinyint(1)   | NO   |     | 1                 |                   |
| date_created | datetime     | NO   |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
| total        | float        | YES  |     | NULL              | STORED GENERATED  |
+--------------+--------------+------+-----+-------------------+-------------------+
8 rows in set (0.00 sec)

PES1UG21CS480>
```


```
mysql> DELIMITER //
mysql>
mysql> CREATE TRIGGER update_purchase_order_list_date
    -> BEFORE UPDATE ON purchase_order_list
    -> FOR EACH ROW
    -> BEGIN
    ->     SET NEW.date_updated = current_timestamp();
    -> END;
    ->
    -> //
Query OK, 0 rows affected (0.04 sec)

mysql>
mysql> DELIMITER ;
mysql>
```

```
mysql> DELIMITER //
mysql> CREATE PROCEDURE GetBackOrderDetails(IN boID INT)
    ->      BEGIN
    ->          DECLARE totalAmount FLOAT;
    ->          DECLARE totalItems FLOAT;
    ->      SELECT SUM(amount) INTO totalAmount FROM back_order_list WHERE id = boID;
    ->      DECLARE item_id INT;
    ->          DECLARE item_quantity INT;
    ->          DECLARE item_price FLOAT;
    ->          DECLARE item_unit VARCHAR(50);
    ->          DECLARE item_total FLOAT;
    ->      DECLARE totalCost FLOAT DEFAULT 0;
    ->          DECLARE totalQuantity INT DEFAULT 0;
    ->      DECLARE cur_bo_items CURSOR FOR
    ->              SELECT item_id, quantity, price, unit, total
    ->              FROM bo_items
    ->              WHERE bo_id = boID;
    ->      OPEN cur_bo_items;
    ->          read_loop: LOOP
    ->              FETCH cur_bo_items INTO item_id, item_quantity, item_price, item_unit, item_total;
    ->              IF FETCH_STATUS() <> 0 THEN
    ->                  LEAVE read_loop;
    ->              END IF;
    ->      SET totalCost = totalCost + item_total;
    ->              SET totalQuantity = totalQuantity + item_quantity;
    ->          END LOOP;
    ->          CLOSE cur_bo_items;
    ->      SELECT totalAmount AS back_order_amount, totalCost AS total_item_cost, totalQuantity AS total_item_quantity;
    ->          END;
    ->          DELIMITER ;
    ->
```

```
mysql> DELIMITER //
mysql>
mysql> CREATE PROCEDURE GetBackOrderDetails(IN boID INT)
    -> BEGIN
    ->      DECLARE totalAmount FLOAT;
    ->      DECLARE totalItems FLOAT;
    ->      DECLARE item_id INT;
    ->      DECLARE item_quantity INT;
    ->      DECLARE item_price FLOAT;
    ->      DECLARE item_unit VARCHAR(50);
    ->      DECLARE item_total FLOAT;
    ->      DECLARE totalCost FLOAT DEFAULT 0;
    ->      DECLARE totalQuantity INT DEFAULT 0;
    ->
    ->
    ->      DECLARE done INT DEFAULT 0;
    ->      DECLARE cur_bo_items CURSOR FOR
    ->          SELECT item_id, quantity, price, unit, total
    ->          FROM bo_items
    ->          WHERE bo_id = boID;
    ->
    ->
    ->      DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
    ->
    ->
    ->      SELECT SUM(amount) INTO totalAmount FROM back_order_list WHERE id = boID;
    ->
    ->
    ->      OPEN cur_bo_items;
    ->      read_loop: LOOP
    ->          FETCH cur_bo_items INTO item_id, item_quantity, item_price, item_unit, item_total;
    ->          IF done THEN
    ->              LEAVE read_loop;
    ->          END IF;
    ->
    ->
    ->          SET totalCost = totalCost + item_total;
    ->          SET totalQuantity = totalQuantity + item_quantity;
    ->      END LOOP;
    ->      CLOSE cur_bo_items;
    ->
    ->
    ->      SELECT totalAmount AS back_order_amount, totalCost AS total_item_cost, totalQuantity AS total_item_quantity;
    -> END;
    ->
    -> //
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DELIMITER ;
mysql>
```

```
mysql> DELIMITER //
mysql>
mysql> CREATE FUNCTION CalculatePOTotalCost(poID INT)
    -> RETURNS FLOAT
    -> DETERMINISTIC
    -> BEGIN
    ->     DECLARE totalCost FLOAT;
    ->
    ->     SELECT SUM(total) INTO totalCost FROM po_items WHERE po_id = poID;
    ->
    ->     RETURN totalCost;
    -> END;
    ->
    -> //
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DELIMITER ;
```

```
mysql> SELECT bo.*, bi.*, sl.name AS supplier_name
    -> FROM back_order_list bo
    -> JOIN bo_items bi ON bo.id = bi.bo_id
    -> JOIN supplier_list sl ON bo.supplier_id = sl.id
    -> WHERE bo.id = 1;
+----+-------------+-------+---------+-------------+--------+---------------+----------+-----------+------+--------+--------+--------+------
--------------+---------------------+-------+---------+----------+-------+------+--------+---------------+
| id | receiving_id | po_id | bo_code | supplier_id | amount | discount_perc | discount | tax_perc | tax  | remarks | status | date_c
reated       | date_updated        | bo_id | item_id | quantity | price | unit | total  | supplier_name |
+----+-------------+-------+---------+-------------+--------+---------------+----------+-----------+------+--------+--------+--------+------
--------------+---------------------+-------+---------+----------+-------+------+--------+---------------+
| 1 |           1 |     1 | BO-0001 |           1 | 40740  |             3 |    1125  |        12 | 4365 | NULL   |      1 | 2021-1
1-03 11:20:38 | 2021-11-03 11:20:51 |     1 |       1 |      250 |  150  | pcs  | 37500  | Supplier 101  |
+----+-------------+-------+---------+-------------+--------+---------------+----------+-----------+------+--------+--------+--------+------
--------------+---------------------+-------+---------+----------+-------+------+--------+---------------+
1 row in set (0.04 sec)

mysql>
```

```
mysql> SELECT bo.*, bi.*, sl.name AS supplier_name
    -> FROM back_order_list bo
    -> JOIN bo_items bi ON bo.id = bi.bo_id
    -> JOIN supplier_list sl ON bo.supplier_id = sl.id
    -> WHERE bo.id = 1;
+----+-------------+-------+---------+-------------+--------+---------------+----------+-----------+------+--------+--------+--------+------
--------------+---------------------+-------+---------+----------+-------+------+--------+---------------+
| id | receiving_id | po_id | bo_code | supplier_id | amount | discount_perc | discount | tax_perc | tax  | remarks | status | date_c
reated       | date_updated        | bo_id | item_id | quantity | price | unit | total  | supplier_name |
+----+-------------+-------+---------+-------------+--------+---------------+----------+-----------+------+--------+--------+--------+------
--------------+---------------------+-------+---------+----------+-------+------+--------+---------------+
| 1 |           1 |     1 | BO-0001 |           1 | 40740  |             3 |    1125  |        12 | 4365 | NULL   |      1 | 2021-1
1-03 11:20:38 | 2021-11-03 11:20:51 |     1 |       1 |      250 |  150  | pcs  | 37500  | Supplier 101  |
+----+-------------+-------+---------+-------------+--------+---------------+----------+-----------+------+--------+--------+--------+------
--------------+---------------------+-------+---------+----------+-------+------+--------+---------------+
1 row in set (0.04 sec)

mysql> SELECT po.*, poi.*, sl.name AS supplier_name
    -> FROM purchase_order_list po
    -> JOIN po_items poi ON po.id = poi.po_id
    -> JOIN supplier_list sl ON po.supplier_id = sl.id
    -> WHERE po.id = 1;
+----+---------+-------------+--------+---------------+----------+-----------+------+---------+--------+---------------------+--------
------------+-------+---------+----------+-------+------+--------+---------------+
| id | po_code | supplier_id | amount | discount_perc | discount | tax_perc | tax  | remarks | status | date_created        | date_up
dated        | po_id | item_id | quantity | price | unit | total  | supplier_name |
+----+---------+-------------+--------+---------------+----------+-----------+------+---------+--------+---------------------+--------
------------+-------+---------+----------+-------+------+--------+---------------+
| 1 | PO-0001 |           1 | 81480  |             3 |    2250  |        12 | 8730 | Sample  |      2 | 2021-11-03 11:20:22 | 2021-11
-03 11:21:00 |     1 |       1 |      500 |  150  | pcs  | 75000  | Supplier 101  |
+----+---------+-------------+--------+---------------+----------+-----------+------+---------+--------+---------------------+--------
------------+-------+---------+----------+-------+------+--------+---------------+
1 row in set (0.01 sec)

mysql>
```

```
mysql> SELECT bo.*, bi.*, sl.name AS supplier_name
    -> FROM back_order_list bo
    -> JOIN bo_items bi ON bo.id = bi.bo_id
    -> JOIN supplier_list sl ON bo.supplier_id = sl.id
    -> WHERE bo.id = 1;
+----+-------------+-------+---------+-------------+----------+---------------+----------+----------+------+---------+--------+---------------------+---------------------+-------+---------+----------+-------+------+-------+---------------+
| id | receiving_id | po_id | bo_code | supplier_id | amount | discount_perc | discount | tax_perc | tax  | remarks | status | date_created        | date_updated        | bo_id | item_id | quantity | price | unit | total | supplier_name |
+----+-------------+-------+---------+-------------+----------+---------------+----------+----------+------+---------+--------+---------------------+---------------------+-------+---------+----------+-------+------+-------+---------------+
| 1  |           1 |     1 | BO-0001 |           1 |  40740 |             3 |     1125 |       12 | 4365 | NULL    |      1 | 2021-11-03 11:20:38 | 2021-11-03 11:20:51 |     1 |       1 |      250 |   150 | pcs  | 37500 | Supplier 101  |
+----+-------------+-------+---------+-------------+----------+---------------+----------+----------+------+---------+--------+---------------------+---------------------+-------+---------+----------+-------+------+-------+---------------+
1 row in set (0.04 sec)

mysql> SELECT po.*, poi.*, sl.name AS supplier_name
    -> FROM purchase_order_list po
    -> JOIN po_items poi ON po.id = poi.po_id
    -> JOIN supplier_list sl ON po.supplier_id = sl.id
    -> WHERE po.id = 1;
+----+---------+-------------+--------+---------------+----------+----------+------+---------+--------+---------------------+---------------------+-------+---------+----------+-------+------+-------+---------------+
| id | po_code | supplier_id | amount | discount_perc | discount | tax_perc | tax  | remarks | status | date_created        | date_updated        | po_id | item_id | quantity | price | unit | total | supplier_name |
+----+---------+-------------+--------+---------------+----------+----------+------+---------+--------+---------------------+---------------------+-------+---------+----------+-------+------+-------+---------------+
| 1  | PO-0001 |           1 |  81480 |             3 |     2250 |       12 | 8730 | Sample  |      2 | 2021-11-03 11:20:22 | 2021-11-03 11:21:00 |     1 |       1 |      500 |   150 | pcs  | 75000 | Supplier 101  |
+----+---------+-------------+--------+---------------+----------+----------+------+---------+--------+---------------------+---------------------+-------+---------+----------+-------+------+-------+---------------+
1 row in set (0.01 sec)

mysql>
```