

1. Data Kelompok:

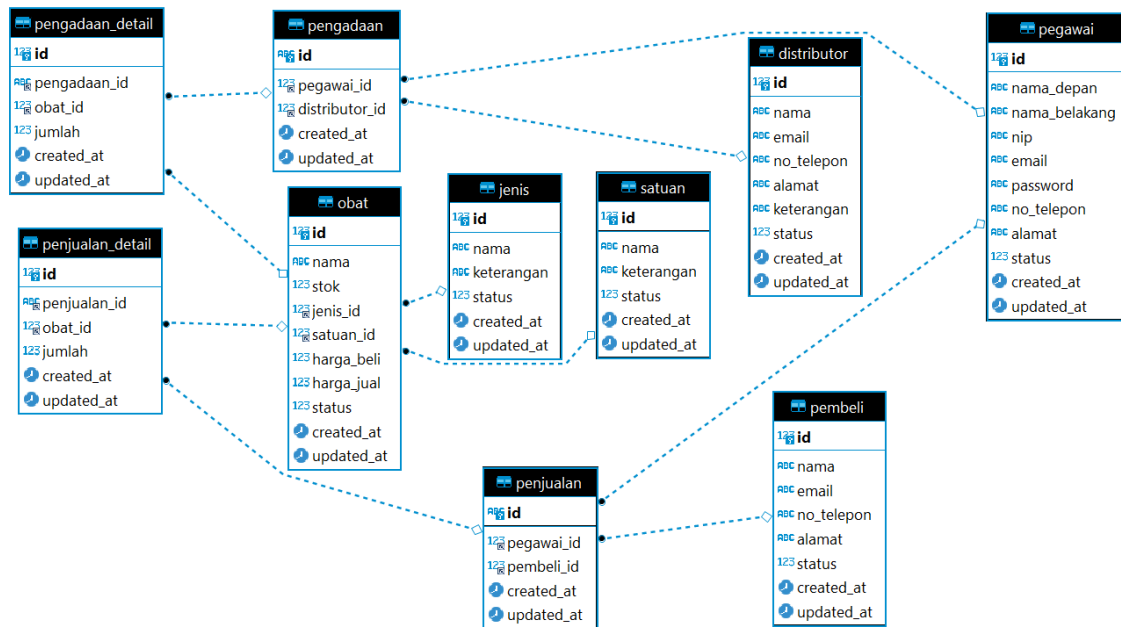
- Adistia Ramadhani 2113191084
- Alam Nurzaman 2113191108
- Dara Atria Ferilandini 2113191098
- Isep Lutpi Nur 2113191079

2. Contoh Kasus:

Penyederhanaan query untuk pengadaan dan penjualan obat serta validasi nama dalam penambahan jenis, kategori dan obat pada database Apotik.

3. Database dan struktur table:

A. Entity Relationship Diagram Database



B. Procedure

1. Insert Jenis (Rollback)

a) Pengertian

Procedure ini berfungsi untuk mem-validasi nama jenis agar nama jenis tidak ada yang lebih dari satu. Cara kerjanya yaitu dengan cara mengambil data jenis dimana namanya sama dengan yang akan ditambahkan, jika dapat lebih dari nol atau sudah ada maka dibawah nya ada decision yaitu jika terdapat nama yang sama maka akan di rollback, tetapi jika tidak maka akan di commit.

b) Sintaks

```
DELIMITER $$
CREATE PROCEDURE `insertJenis` (
  IN `nama` VARCHAR(255),
  IN `keterangan` TEXT,
  IN `status` ENUM('1','0')
)
BEGIN
  DECLARE hitungJenis INT(11);
  DECLARE result VARCHAR(255);
  SET hitungJenis = (SELECT count(*) FROM jenis WHERE jenis.nama = nama);

  START TRANSACTION;
  INSERT INTO jenis
  VALUES(null, nama, keterangan, status,
    CURRENT_TIMESTAMP(),
    CURRENT_TIMESTAMP());

  IF(hitungJenis > 0) THEN
    ROLLBACK;
    SET result = 'Nama Jenis Sudah Digunakan';
  ELSE
    COMMIT;
    SET result = 'Jenis berhasil disimpan';
  END IF;
  SELECT result;
END$$
DELIMITER ;
```

2. Pengadaan Header

a) Pengertian

Pengadaan header ini berfungsi untuk header tabel pengadaan_detail. Pengadaan header akan menambahkan data ke tabel pengadaan.

b) Sintaks

```
DELIMITER $$
CREATE PROCEDURE `insertPengadaanHeader` (
  IN `id` VARCHAR(255),
  IN `pegawai_id` INT(11),
  IN `distributor_id` INT(11)
)
BEGIN
  INSERT INTO pengadaan VALUES(
    id,
    pegawai_id,
    distributor_id,
    CURRENT_TIMESTAMP(),
```

```

        CURRENT_TIMESTAMP()
    );
END$$
DELIMITER ;

```

3. Pengadaan Body

a) Pengertian

Procediure ini berfungsi untuk pengadaan obat. Dalam procedure ini terdapat 2 query yaitu update stok obat (menambahkan stok obat) dan insert pengadaan detail. Prosedur ini juga berfungsi untuk menyederhanakan 2 query update dan insert.

b) Sintaks

```

DELIMITER $$
CREATE PROCEDURE `insertPengadaanBody`(
    IN `pengadaan_id` VARCHAR(255),
    IN `obat_id` INT(11),
    IN `jumlah` INT(11)
)
BEGIN
    UPDATE obat SET stok = (stok + jumlah) WHERE id = obat_id;
    INSERT INTO pengadaan_detail VALUES (
        null, pengadaan_id, obat_id, jumlah,
        CURRENT_TIMESTAMP(),
        CURRENT_TIMESTAMP()
    );
END$$
DELIMITER ;

```

4. Pengadaan View

a) Pengertian

Prosedure ini berfungsi untuk melihat perubahan dari query pengadaan sebelumnya.

b) Sintaks

```

DELIMITER $$
CREATE PROCEDURE `insertPengadaanView`(
    in pengadaan_id varchar(255)
)
BEGIN
    SELECT
        b.id,
        obat.nama as obat_nama,
        (obat.stok - a.jumlah) as stok_asal,
        a.jumlah as tambah_jumlah,
        obat.stok as stok_sekarang,
        concat(pegawai.nama_depan, ' ', pegawai.nama_belakang) as pegawai_nama,
        distributor.nama as distributor_nama

```

```

FROM
    pengadaan_detail as a
JOIN
    pengadaan as b ON a.pengadaan_id = b.id
JOIN
    obat ON a.obat_id = obat.id
JOIN
    pegawai ON b.pegawai_id = pegawai.id
JOIN
    distributor ON b.distributor_id = distributor.id
WHERE
    a.pengadaan_id = pengadaan_id;
END$$
DELIMITER ;

```

5. Penjualan Header

c) Pengertian

Penjualan header ini berfungsi untuk header tabel penjualan_detail. Penjualan header akan menambahkan data ke tabel pengadaan.

d) Sintaks

```

DELIMITER $$
CREATE PROCEDURE `insertPenjualanHeader`(
    in id varchar(255),
    in pegawai_id int(11),
    in pembeli_id int(11)
)
BEGIN
    INSERT INTO penjualan VALUES(
        id,
        pegawai_id,
        pembeli_id,
        CURRENT_TIMESTAMP(),
        CURRENT_TIMESTAMP()
    );
END$$
DELIMITER ;

```

6. Penjualan Body

c) Pengertian

Procedure ini berfungsi untuk penjualan obat. Dalam procedure ini terdapat 2 query yaitu update stok obat (Mengurangi stok obat) dan insert penjualan detail. Prosedur ini juga berfungsi untuk menyederhanakan 2 query update dan insert.

d) Sintaks

```
DELIMITER $$
CREATE PROCEDURE `insertPenjualanBody` (
  IN penjualan_id VARCHAR(255),
  IN obat_id INT(11),
  IN jumlah INT(11)
)
BEGIN
  UPDATE obat SET stok = (stok - jumlah) WHERE id = obat_id;
  INSERT INTO penjualan_detail VALUES (
    null, penjualan_id, obat_id, jumlah,
    CURRENT_TIMESTAMP(), CURRENT_TIMESTAMP()
  );
END$$
DELIMITER
```

7. Penjualan View

c) Pengertian

Prosedure ini berfungsi untuk melihat perubahan dari query pengadaan sebelumnya.

d) Sintaks

```
DELIMITER $$
CREATE PROCEDURE `insertPenjualanView` (
  IN penjualan_id VARCHAR(255)
)
BEGIN
  SELECT
    b.id,
    obat.nama as obat_nama,
    (obat.stok + a.jumlah) as stok_asal,
    a.jumlah as kurang_jumlah,
    obat.stok as stok_sekarang,
    concat(pegawai.nama_depan, ' ', pegawai.nama_belakang) as pegawai_nama,
    pembeli.nama as pembeli_nama
  FROM
    penjualan_detail as a
  JOIN
    penjualan as b ON a.penjualan_id = b.id
  JOIN
    obat ON a.obat_id = obat.id
  JOIN
    pegawai ON b.pegawai_id = pegawai.id
  LEFT JOIN
    pembeli ON b.pembeli_id = pembeli.id
  WHERE
    a.penjualan_id = penjualan_id;
END$$
DELIMITER ;
```

C. Import

```
-- phpMyAdmin SQL Dump
-- version 5.1.1
-- https://www.phpmyadmin.net/
--
-- Host: 127.0.0.1:3306
-- Generation Time: Dec 10, 2021 at 06:26 AM
-- Server version: 10.4.20-MariaDB
-- PHP Version: 7.4.21

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

--
-- Database: `apotik`
--

DELIMITER $$

--
-- Procedures
--
CREATE DEFINER=`root`@`localhost` PROCEDURE `getObat` () BEGIN
    select * from obat;
END$$

CREATE DEFINER=`root`@`localhost` PROCEDURE `insertJenis` (IN `nama` VARCHAR(255), IN
`keterangan` TEXT, IN `status` ENUM('1','0')) BEGIN
    DECLARE hitungJenis INT(11);
    DECLARE result VARCHAR(255);
    SET hitungJenis = (SELECT count(*) FROM jenis WHERE jenis.nama = nama);

    START TRANSACTION;
    INSERT INTO jenis
    VALUES(null, nama, keterangan, status,
        CURRENT_TIMESTAMP(),
        CURRENT_TIMESTAMP());

    IF(hitungJenis > 0) THEN
        ROLLBACK;
        SET result = 'Nama Jenis Sudah Digunakan';
    ELSE
        COMMIT;
        SET result = 'Jenis berhasil disimpan';
    END IF;
END
```

```

    END IF;
    SELECT result;
END$$

CREATE DEFINER=`root`@`localhost` PROCEDURE `insertPengadaanBody` (IN `pengadaan_id`
VARCHAR(255), IN `obat_id` INT(11), IN `jumlah` INT(11)) BEGIN
    UPDATE obat SET stok = (stok + jumlah) WHERE id = obat_id;

    INSERT INTO pengadaan_detail VALUES (
        null, pengadaan_id, obat_id, jumlah,
        CURRENT_TIMESTAMP(),
        CURRENT_TIMESTAMP()
    );
END$$

CREATE DEFINER=`root`@`localhost` PROCEDURE `insertPengadaanHeader` (IN `id` VARCHAR(255), IN
`pegawai_id` INT(11), IN `distributor_id` INT(11)) BEGIN
    INSERT INTO pengadaan VALUES(
        id,
        pegawai_id,
        distributor_id,
        CURRENT_TIMESTAMP(),
        CURRENT_TIMESTAMP()
    );
END$$

CREATE DEFINER=`root`@`localhost` PROCEDURE `insertPengadaanView` (IN `pengadaan_id`
VARCHAR(255)) BEGIN
SELECT
    b.id,
    obat.nama as obat_nama,
    (obat.stok - a.jumlah) as stok_asal,
    a.jumlah as tambah_jumlah,
    obat.stok as stok_sekarang,
    concat(pegawai.nama_depan, ' ', pegawai.nama_belakang) as pegawai_nama,
    distributor.nama as distributor_nama
FROM
    pengadaan_detail as a
JOIN
    pengadaan as b ON a.pengadaan_id = b.id
JOIN
    obat ON a.obat_id = obat.id
JOIN
    pegawai ON b.pegawai_id = pegawai.id
JOIN
    distributor ON b.distributor_id = distributor.id
WHERE
    a.pengadaan_id = pengadaan_id;
END$$

```

```

CREATE DEFINER=`root`@`localhost` PROCEDURE `insertPenjualanBody` (IN `penjualan_id`
VARCHAR(255), IN `obat_id` INT(11), IN `jumlah` INT(11)) BEGIN
    UPDATE obat SET stok = (stok - jumlah) WHERE id = obat_id;
    INSERT INTO penjualan_detail VALUES (
        null, penjualan_id, obat_id, jumlah,
        CURRENT_TIMESTAMP(),
        CURRENT_TIMESTAMP()
    );
END$$

CREATE DEFINER=`root`@`localhost` PROCEDURE `insertPenjualanHeader` (IN `id` VARCHAR(255), IN
`pegawai_id` INT(11), IN `pembeli_id` INT(11)) BEGIN
    INSERT INTO penjualan VALUES(
        id,
        pegawai_id,
        pembeli_id,
        CURRENT_TIMESTAMP(),
        CURRENT_TIMESTAMP()
    );
END$$

CREATE DEFINER=`root`@`localhost` PROCEDURE `insertPenjualanView` (IN `penjualan_id`
VARCHAR(255)) BEGIN
    SELECT
        b.id,
        obat.nama as obat_nama,
        (obat.stok + a.jumlah) as stok_asal,
        a.jumlah as kurang_jumlah,
        obat.stok as stok_sekarang,
        concat(pegawai.nama_depan, ' ', pegawai.nama_belakang) as pegawai_nama,
        pembeli.nama as pembeli_nama
    FROM
        penjualan_detail as a
    JOIN
        penjualan as b ON a.penjualan_id = b.id
    JOIN
        obat ON a.obat_id = obat.id
    JOIN
        pegawai ON b.pegawai_id = pegawai.id
    LEFT JOIN
        pembeli ON b.pembeli_id = pembeli.id
    WHERE
        a.penjualan_id = penjualan_id;
END$$

CREATE DEFINER=`root`@`localhost` PROCEDURE `log` (`msg` VARCHAR(255)) BEGIN
    select concat('** ', msg) AS '** DEBUG: ';
END$$

DELIMITER ;

```



```
--  
-- Table structure for table `distributor`  
--
```

```
CREATE TABLE `distributor` (  
  `id` int(11) NOT NULL,  
  `nama` varchar(255) DEFAULT NULL,  
  `email` varchar(255) DEFAULT NULL,  
  `no_telepon` varchar(255) DEFAULT NULL,  
  `alamat` text DEFAULT NULL,  
  `keterangan` text DEFAULT NULL,  
  `status` int(11) DEFAULT NULL COMMENT '0 Tidak Aktif | 1 Aktif',  
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),  
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
--  
-- Dumping data for table `distributor`  
--
```

```
INSERT INTO `distributor` (`id`, `nama`, `email`, `no_telepon`, `alamat`, `keterangan`,  
`status`, `created_at`, `updated_at`) VALUES  
(1, 'Pt Kimia farma', 'kimiafarma@gmail.com', '085798132505', 'Bandung', 'Dumy', 1, '2021-10-  
07 12:28:40', '2021-10-07 12:28:40'),  
(2, 'Pt obat sakti', 'sakti', '123', '123', 'ket', 1, '2021-10-07 12:28:40', '2021-10-07  
12:28:40');
```

```
--  
-- Table structure for table `jenis`  
--
```

```
CREATE TABLE `jenis` (  
  `id` int(11) NOT NULL,  
  `nama` varchar(255) DEFAULT NULL,  
  `keterangan` text DEFAULT NULL,  
  `status` int(11) DEFAULT NULL COMMENT '0 Tidak Aktif | 1 Aktif',  
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),  
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
--  
-- Dumping data for table `jenis`  
--
```

```
INSERT INTO `jenis` (`id`, `nama`, `keterangan`, `status`, `created_at`, `updated_at`) VALUES
```

```

(1, 'Cair', 'ket', 1, '2021-10-07 12:31:45', '2021-10-07 12:31:45'),
(2, 'Tablet', 'ket', 1, '2021-10-07 12:31:45', '2021-10-07 12:31:45'),
(3, 'Kapsul', 'ket', 1, '2021-10-07 12:31:45', '2021-10-07 12:31:45'),
(4, 'Pill', 'ket', 1, '2021-10-07 12:31:45', '2021-10-07 12:31:45'),
(5, 'Serbuk', 'ket', 1, '2021-10-07 12:31:45', '2021-10-07 12:31:45'),
(6, 'Salep', 'ket', 1, '2021-10-07 12:31:45', '2021-10-07 12:31:45'),
(7, 'Tetes', 'ket', 1, '2021-10-07 12:31:45', '2021-10-07 12:31:45');

-- -----

--
-- Table structure for table `obat`
--

CREATE TABLE `obat` (
  `id` int(11) NOT NULL,
  `nama` varchar(255) DEFAULT NULL,
  `stok` int(11) DEFAULT NULL,
  `jenis_id` int(11) DEFAULT NULL,
  `satuan_id` int(11) DEFAULT NULL,
  `harga_beli` bigint(20) DEFAULT NULL,
  `harga_jual` bigint(20) DEFAULT NULL,
  `status` int(11) DEFAULT NULL COMMENT '0 Tidak Aktif | 1 Aktif',
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `obat`
--

INSERT INTO `obat` (`id`, `nama`, `stok`, `jenis_id`, `satuan_id`, `harga_beli`,
`harga_jual`, `status`, `created_at`, `updated_at`) VALUES
(1, 'Paracetamol', 45, 2, 2, 2500, 5000, 1, '2021-10-07 12:34:48', '2021-12-10 11:01:54'),
(2, 'Kataflam', 0, 2, 2, 10000, 15000, 1, '2021-10-07 12:41:44', '2021-10-07 12:41:44'),
(3, 'Antimo', 26, 1, 2, 5000, 7500, 1, '2021-10-07 12:41:44', '2021-12-10 11:01:54'),
(4, 'Tramadol', 5, 1, 1, 10000, 15000, 1, '2021-10-07 12:49:07', '2021-12-10 11:01:54'),
(5, 'PIROXICAM', 5, 2, 1, 100000, 150000, 1, '2021-10-09 13:38:36', '2021-12-10 11:01:54'),
(6, 'Hydrocorti', 1, 6, 2, 10000, 13000, 1, '2021-10-09 13:38:36', '2021-10-09 16:38:20'),
(7, 'Acyclovir Cream', 1, 6, 2, 7000, 10000, 1, '2021-10-09 13:40:26', '2021-10-09
16:38:17'),
(8, 'Ethambutol', 2, 2, 2, 20000, 21000, 1, '2021-10-09 13:40:26', '2021-10-09 16:38:13'),
(9, 'Promag', 5, 2, 1, 13000, 15000, 1, '2021-10-09 13:43:41', '2021-10-09 16:38:10'),
(10, 'Nebacetin', 4, 5, 2, 20000, 25000, 1, '2021-10-09 13:43:41', '2021-10-09 16:38:05');

-- -----

--
-- Table structure for table `pegawai`
--

```

```

CREATE TABLE `pegawai` (
  `id` int(11) NOT NULL,
  `nama_depan` varchar(255) DEFAULT NULL,
  `nama_belakang` varchar(255) DEFAULT NULL,
  `nip` varchar(255) DEFAULT NULL,
  `email` varchar(255) DEFAULT NULL,
  `password` varchar(255) DEFAULT NULL,
  `no_telepon` varchar(255) DEFAULT NULL,
  `alamat` text DEFAULT NULL,
  `status` int(11) DEFAULT NULL COMMENT '0 Tidak Aktif | 1 Aktif',
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `pegawai`
--

INSERT INTO `pegawai` (`id`, `nama_depan`, `nama_belakang`, `nip`, `email`, `password`,
`no_telepon`, `alamat`, `status`, `created_at`, `updated_at`) VALUES
(1, 'Isep Lutpi', 'Nur', '2113191234', 'iseplutfinur@gmail.com', 'isep1234', '0888134689793',
'Sekeloa, Bandung', 1, '2021-10-09 13:49:29', '2021-10-09 13:59:29'),
(2, 'Adistia ', 'Ramadhani', '2113174658', 'adistiaramadhani@gmail.com', 'adistia123',
'089364765685', 'Antapani,Bandung', 1, '2021-10-09 13:49:29', '2021-10-09 13:49:29'),
(3, 'Alam', 'Nurzaman', '21131746568', 'alamnurzaman@gmail.com', 'alam1234', '088834561239',
'Ciumbuleuit, Bandung', 1, '2021-10-09 13:55:47', '2021-10-09 13:55:47'),
(4, 'Dara Atria', 'Ferliandini', '2113191098', 'daraatriaferliandini@gmail.com', 'dara1234',
'0889391328', 'Cikutra Barat, Bandung', 1, '2021-10-09 13:55:47', '2021-10-09 13:55:47');

-----

--
-- Table structure for table `pembeli`
--

CREATE TABLE `pembeli` (
  `id` int(11) NOT NULL,
  `nama` varchar(255) DEFAULT NULL,
  `email` varchar(255) DEFAULT NULL,
  `no_telepon` varchar(255) DEFAULT NULL,
  `alamat` text DEFAULT NULL,
  `status` int(11) DEFAULT NULL COMMENT '0 Tidak Aktif | 1 Aktif',
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `pembeli`
--

```

```

INSERT INTO `pembeli` (`id`, `nama`, `email`, `no_telepon`, `alamat`, `status`, `created_at`,
`updated_at`) VALUES
(1, 'Zayn Malik', 'zaynmalik@gmail.com', '08889391329', 'Bojongkoneng', 1, '2021-10-09
13:58:45', '2021-10-09 13:58:45'),
(2, 'Harry Styles', 'harrys@gmail.com', '088854328586', 'Cibangkong', 1, '2021-10-09
13:58:45', '2021-10-09 13:58:45'),
(3, 'Gigi Hadid', 'gigihadid@gmail.com', '088938656877', 'Sadang Serang', 1, '2021-10-09
14:01:49', '2021-10-09 14:01:49'),
(4, 'Kendall Jenner', 'kendaljnn@gmail.com', '089374656836', 'Cicaheum', 1, '2021-10-09
14:01:49', '2021-10-09 14:01:49');

```

```

-----

```

```

--
-- Table structure for table `pengadaan`
--

```

```

CREATE TABLE `pengadaan` (
  `id` varchar(255) NOT NULL,
  `pegawai_id` int(11) DEFAULT NULL,
  `distributor_id` int(11) DEFAULT NULL,
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

```

```

--
-- Dumping data for table `pengadaan`
--

```

```

INSERT INTO `pengadaan` (`id`, `pegawai_id`, `distributor_id`, `created_at`, `updated_at`)
VALUES
('1', 1, 1, '2021-12-10 11:01:54', '2021-12-10 11:01:54'),
('PENG123', 1, 1, '2021-12-10 10:54:10', '2021-12-10 10:54:10'),
('PENG12311', 1, 1, '2021-12-10 10:56:33', '2021-12-10 10:56:33'),
('SM-2021011', 1, 1, '2021-01-01 14:16:28', '2021-10-09 23:36:11'),
('SM-2021012', 1, 1, '2021-01-15 14:16:28', '2021-10-09 23:36:13'),
('SM-2021021', 2, 2, '2021-02-01 14:16:28', '2021-10-09 23:36:17'),
('SM-2021022', 1, 1, '2021-02-15 14:16:28', '2021-10-09 23:36:15'),
('SM-2021031', 1, 2, '2021-03-01 14:16:28', '2021-10-09 23:36:21'),
('SM-2021032', 3, 1, '2021-03-15 14:16:28', '2021-10-09 23:36:27'),
('SM-2021041', 1, 1, '2021-04-01 14:16:28', '2021-10-09 23:36:34'),
('SM-2021042', 1, 2, '2021-04-15 14:16:28', '2021-10-09 23:36:31'),
('SM-2021051', 1, 1, '2021-05-01 14:16:28', '2021-10-09 23:36:29'),
('SM-2021052', 3, 1, '2021-05-15 14:16:28', '2021-10-09 23:36:38'),
('SM-2021054', 3, 1, '2021-05-15 14:16:28', '2021-10-09 23:36:38');

```

```

-----

```

```

--

```

```
-- Table structure for table `pengadaan_detail`
--

CREATE TABLE `pengadaan_detail` (
  `id` int(11) NOT NULL,
  `pengadaan_id` varchar(255) DEFAULT NULL,
  `obat_id` int(11) DEFAULT NULL,
  `jumlah` int(11) DEFAULT NULL,
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--

-- Dumping data for table `pengadaan_detail`
--

INSERT INTO `pengadaan_detail` (`id`, `pengadaan_id`, `obat_id`, `jumlah`, `created_at`,
`updated_at`) VALUES
(1, 'SM-2021011', 1, 5, '2021-01-01 14:44:20', '2021-01-01 14:44:20'),
(2, 'SM-2021012', 2, 3, '2021-01-15 14:44:20', '2021-01-15 14:44:20'),
(3, 'SM-2021021', 3, 2, '2021-02-01 14:45:44', '2021-02-01 14:45:44'),
(4, 'SM-2021022', 4, 5, '2021-02-15 14:45:44', '2021-02-15 14:45:44'),
(5, 'SM-2021031', 5, 7, '2021-03-01 14:47:15', '2021-03-01 14:47:15'),
(6, 'SM-2021032', 6, 5, '2021-03-15 14:47:15', '2021-03-15 14:47:15'),
(7, 'SM-2021041', 7, 4, '2021-04-01 14:52:11', '2021-04-01 14:52:11'),
(8, 'SM-2021042', 8, 8, '2021-04-15 14:52:11', '2021-04-15 14:52:11'),
(9, 'SM-2021051', 9, 5, '2021-05-01 14:55:55', '2021-05-01 14:55:55'),
(10, 'SM-2021052', 3, 1, '2021-05-15 14:55:55', '2021-10-09 23:35:21'),
(19, 'PENG123', 1, 5, '2021-12-10 10:54:10', '2021-12-10 10:54:10'),
(20, 'PENG123', 3, 5, '2021-12-10 10:54:10', '2021-12-10 10:54:10'),
(27, 'PENG12311', 1, 5, '2021-12-10 10:56:33', '2021-12-10 10:56:33'),
(28, 'PENG12311', 3, 5, '2021-12-10 10:56:33', '2021-12-10 10:56:33'),
(29, '1', 1, 5, '2021-12-10 11:01:54', '2021-12-10 11:01:54'),
(30, '1', 3, 5, '2021-12-10 11:01:54', '2021-12-10 11:01:54'),
(31, '1', 4, 5, '2021-12-10 11:01:54', '2021-12-10 11:01:54'),
(32, '1', 5, 5, '2021-12-10 11:01:54', '2021-12-10 11:01:54');

-- -----

--

-- Table structure for table `penjualan`
--

CREATE TABLE `penjualan` (
  `id` varchar(255) NOT NULL,
  `pegawai_id` int(11) DEFAULT NULL,
  `pembeli_id` int(11) DEFAULT NULL,
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
--
-- Dumping data for table `penjualan`
--

INSERT INTO `penjualan` (`id`, `pegawai_id`, `pembeli_id`, `created_at`, `updated_at`) VALUES
('SK-2021011', 4, NULL, '2021-01-06 15:00:34', '2021-10-09 16:03:13'),
('SK-2021012', 2, NULL, '2021-01-08 15:00:34', '2021-10-09 16:03:07'),
('SK-2021021', 1, 4, '2021-02-04 15:00:34', '2021-10-09 15:50:53'),
('SK-2021022', 3, NULL, '2021-02-06 15:00:34', '2021-10-09 15:52:30'),
('SK-2021031', 1, NULL, '2021-03-07 15:00:34', '2021-10-09 16:03:19'),
('SK-2021032', 2, 2, '2021-03-15 15:00:34', '2021-10-09 15:51:19'),
('SK-2021041', 3, 4, '2021-04-09 15:00:34', '2021-10-09 15:51:27'),
('SK-2021042', 2, 1, '2021-04-20 15:00:34', '2021-10-09 15:51:35'),
('SK-2021051', 1, NULL, '2021-05-13 15:00:34', '2021-10-09 15:52:40'),
('SK-2021052', 4, 2, '2021-05-16 15:00:34', '2021-10-09 15:51:55');

-----

--
-- Table structure for table `penjualan_detail`
--

CREATE TABLE `penjualan_detail` (
  `id` int(11) NOT NULL,
  `penjualan_id` varchar(255) DEFAULT NULL,
  `obat_id` int(11) DEFAULT NULL,
  `jumlah` int(11) DEFAULT NULL,
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `penjualan_detail`
--

INSERT INTO `penjualan_detail` (`id`, `penjualan_id`, `obat_id`, `jumlah`, `created_at`, `updated_at`) VALUES
(11, 'SK-2021011', 1, 1, '2021-01-06 00:00:00', '2021-01-06 00:00:00'),
(12, 'SK-2021011', 3, 1, '2021-01-06 00:00:00', '2021-01-06 00:00:00'),
(13, 'SK-2021011', 4, 3, '2021-01-06 00:00:00', '2021-01-06 00:00:00'),
(14, 'SK-2021012', 1, 2, '2021-08-01 00:00:00', '2021-08-01 00:00:00'),
(15, 'SK-2021012', 2, 1, '2021-08-01 00:00:00', '2021-08-01 00:00:00'),
(16, 'SK-2021021', 1, 1, '2021-02-04 00:00:00', '2021-02-04 00:00:00'),
(17, 'SK-2021021', 2, 1, '2021-02-04 00:00:00', '2021-02-04 00:00:00'),
(18, 'SK-2021021', 3, 1, '2021-02-04 00:00:00', '2021-02-04 00:00:00'),
(19, 'SK-2021021', 4, 2, '2021-02-04 00:00:00', '2021-02-04 00:00:00'),
(20, 'SK-2021022', 5, 1, '2021-02-06 00:00:00', '2021-02-06 00:00:00'),
(21, 'SK-2021022', 6, 1, '2021-02-06 00:00:00', '2021-02-06 00:00:00'),
(22, 'SK-2021031', 5, 1, '2021-03-07 00:00:00', '2021-03-07 00:00:00'),
```

```

(23, 'SK-2021031', 6, 1, '2021-03-07 00:00:00', '2021-03-07 00:00:00'),
(24, 'SK-2021032', 5, 1, '0000-00-00 00:00:00', '0000-00-00 00:00:00'),
(25, 'SK-2021032', 6, 1, '0000-00-00 00:00:00', '0000-00-00 00:00:00'),
(26, 'SK-2021032', 7, 3, '0000-00-00 00:00:00', '0000-00-00 00:00:00'),
(27, 'SK-2021032', 8, 2, '0000-00-00 00:00:00', '0000-00-00 00:00:00'),
(28, 'SK-2021041', 5, 1, '2021-09-04 00:00:00', '2021-09-04 00:00:00'),
(29, 'SK-2021041', 6, 1, '2021-09-04 00:00:00', '2021-09-04 00:00:00'),
(30, 'SK-2021042', 5, 1, '0000-00-00 00:00:00', '0000-00-00 00:00:00'),
(31, 'SK-2021042', 8, 2, '0000-00-00 00:00:00', '0000-00-00 00:00:00'),
(32, 'SK-2021051', 5, 1, '0000-00-00 00:00:00', '0000-00-00 00:00:00'),
(33, 'SK-2021051', 8, 2, '0000-00-00 00:00:00', '0000-00-00 00:00:00'),
(34, 'SK-2021052', 5, 1, '0000-00-00 00:00:00', '0000-00-00 00:00:00');

-- -----
--
-- Table structure for table `satuan`
--

CREATE TABLE `satuan` (
  `id` int(11) NOT NULL,
  `nama` varchar(255) DEFAULT NULL,
  `keterangan` text DEFAULT NULL,
  `status` int(11) DEFAULT NULL COMMENT '0 Tidak Aktif | 1 Aktif',
  `created_at` datetime NOT NULL DEFAULT current_timestamp(),
  `updated_at` datetime NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `satuan`
--

INSERT INTO `satuan` (`id`, `nama`, `keterangan`, `status`, `created_at`, `updated_at`)
VALUES
(1, 'Box', NULL, 1, '2021-10-07 12:33:24', '2021-10-07 12:33:24'),
(2, 'Pcs', NULL, 1, '2021-10-07 12:33:24', '2021-10-07 12:33:34');

--
-- Indexes for dumped tables
--

--
-- Indexes for table `distributor`
--
ALTER TABLE `distributor`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `jenis`
--

```

```
ALTER TABLE `jenis`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `obat`
--
ALTER TABLE `obat`
  ADD PRIMARY KEY (`id`),
  ADD KEY `jenis_id` (`jenis_id`),
  ADD KEY `satuan_id` (`satuan_id`);

--
-- Indexes for table `pegawai`
--
ALTER TABLE `pegawai`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `pembeli`
--
ALTER TABLE `pembeli`
  ADD PRIMARY KEY (`id`);

--
-- Indexes for table `pengadaan`
--
ALTER TABLE `pengadaan`
  ADD PRIMARY KEY (`id`),
  ADD KEY `distributor_id` (`distributor_id`),
  ADD KEY `pegawai_id` (`pegawai_id`);

--
-- Indexes for table `pengadaan_detail`
--
ALTER TABLE `pengadaan_detail`
  ADD PRIMARY KEY (`id`),
  ADD KEY `pengadaan_detail_ibfk_1` (`pengadaan_id`),
  ADD KEY `pengadaan_detail_ibfk_2` (`obat_id`);

--
-- Indexes for table `penjualan`
--
ALTER TABLE `penjualan`
  ADD PRIMARY KEY (`id`),
  ADD KEY `pembeli_id` (`pembeli_id`),
  ADD KEY `pegawai_id` (`pegawai_id`);

--
-- Indexes for table `penjualan_detail`
--
```



```
ALTER TABLE `penjualan_detail`
  ADD PRIMARY KEY (`id`),
  ADD KEY `penjualan_detail_ibfk_1` (`penjualan_id`),
  ADD KEY `penjualan_detail_ibfk_2` (`obat_id`);

--
-- Indexes for table `satuan`
--
ALTER TABLE `satuan`
  ADD PRIMARY KEY (`id`);

--
-- AUTO_INCREMENT for dumped tables
--

--
-- AUTO_INCREMENT for table `distributor`
--
ALTER TABLE `distributor`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;

--
-- AUTO_INCREMENT for table `jenis`
--
ALTER TABLE `jenis`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=15;

--
-- AUTO_INCREMENT for table `obat`
--
ALTER TABLE `obat`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=11;

--
-- AUTO_INCREMENT for table `pegawai`
--
ALTER TABLE `pegawai`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=5;

--
-- AUTO_INCREMENT for table `pembeli`
--
ALTER TABLE `pembeli`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=5;

--
-- AUTO_INCREMENT for table `pengadaan_detail`
--
ALTER TABLE `pengadaan_detail`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=33;
```

```
--
-- AUTO_INCREMENT for table `penjualan_detail`
--
ALTER TABLE `penjualan_detail`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=35;

--
-- AUTO_INCREMENT for table `satuan`
--
ALTER TABLE `satuan`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;

--
-- Constraints for dumped tables
--

--
-- Constraints for table `obat`
--
ALTER TABLE `obat`
  ADD CONSTRAINT `obat_ibfk_1` FOREIGN KEY (`jenis_id`) REFERENCES `jenis` (`id`),
  ADD CONSTRAINT `obat_ibfk_2` FOREIGN KEY (`satuan_id`) REFERENCES `satuan` (`id`);

--
-- Constraints for table `pengadaan`
--
ALTER TABLE `pengadaan`
  ADD CONSTRAINT `pengadaan_ibfk_1` FOREIGN KEY (`distributor_id`) REFERENCES `distributor`
(`id`),
  ADD CONSTRAINT `pengadaan_ibfk_2` FOREIGN KEY (`pegawai_id`) REFERENCES `pegawai` (`id`);

--
-- Constraints for table `pengadaan_detail`
--
ALTER TABLE `pengadaan_detail`
  ADD CONSTRAINT `pengadaan_detail_ibfk_1` FOREIGN KEY (`pengadaan_id`) REFERENCES
`pengadaan` (`id`) ON DELETE CASCADE,
  ADD CONSTRAINT `pengadaan_detail_ibfk_2` FOREIGN KEY (`obat_id`) REFERENCES `obat` (`id`)
ON DELETE CASCADE;

--
-- Constraints for table `penjualan`
--
ALTER TABLE `penjualan`
  ADD CONSTRAINT `penjualan_ibfk_1` FOREIGN KEY (`pembeli_id`) REFERENCES `pembeli` (`id`),
  ADD CONSTRAINT `penjualan_ibfk_2` FOREIGN KEY (`pegawai_id`) REFERENCES `pegawai` (`id`);

--
-- Constraints for table `penjualan_detail`
```

```
--
ALTER TABLE `penjualan_detail`
  ADD CONSTRAINT `penjualan_detail_ibfk_1` FOREIGN KEY (`penjualan_id`) REFERENCES
`penjualan` (`id`) ON DELETE CASCADE,
  ADD CONSTRAINT `penjualan_detail_ibfk_2` FOREIGN KEY (`obat_id`) REFERENCES `obat` (`id`)
ON DELETE CASCADE;
COMMIT;

/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

4. Penjelasan Kasus

A. Contoh kasus transaksi dengan commit biasa

1. Transaksi Normal

a) Sintaks

```
START TRANSACTION; -- Start
SET @pengadaan_id = 'SM-20211250';
SET @pegawai_id = 1; -- Isep Lutpi
SET @distributor_id = 1; -- Pt Kimia Farma

-- Header
CALL insertPengadaanHeader(@pengadaan_id, @pegawai_id, @distributor_id);

-- Body
SET @obat = 1; -- Paracetamol
SET @jumlah = 5;
CALL insertPengadaanBody(@pengadaan_id, @obat, @jumlah);

SET @obat = 3; -- Antimo
SET @jumlah = 5;
CALL insertPengadaanBody(@pengadaan_id, @obat, @jumlah);

-- View
CALL insertPengadaanView(@pengadaan_id);

COMMIT; -- End
```

b) Hasil

- Tabel pengadaan sebelum

| | | | | id | pegawai_id | distributor_id | created_at | updated_at |
|--------------------------|--|--|--|------------|------------|----------------|---------------------|---------------------|
| <input type="checkbox"/> | | | | SM-2021011 | 1 | 1 | 2021-01-01 14:16:28 | 2021-10-09 23:36:11 |
| <input type="checkbox"/> | | | | SM-2021012 | 1 | 1 | 2021-01-15 14:16:28 | 2021-10-09 23:36:13 |
| <input type="checkbox"/> | | | | SM-2021021 | 2 | 2 | 2021-02-01 14:16:28 | 2021-10-09 23:36:17 |
| <input type="checkbox"/> | | | | SM-2021022 | 1 | 1 | 2021-02-15 14:16:28 | 2021-10-09 23:36:15 |
| <input type="checkbox"/> | | | | SM-2021031 | 1 | 2 | 2021-03-01 14:16:28 | 2021-10-09 23:36:21 |
| <input type="checkbox"/> | | | | SM-2021032 | 3 | 1 | 2021-03-15 14:16:28 | 2021-10-09 23:36:27 |
| <input type="checkbox"/> | | | | SM-2021041 | 1 | 1 | 2021-04-01 14:16:28 | 2021-10-09 23:36:34 |
| <input type="checkbox"/> | | | | SM-2021042 | 1 | 2 | 2021-04-15 14:16:28 | 2021-10-09 23:36:31 |
| <input type="checkbox"/> | | | | SM-2021051 | 1 | 1 | 2021-05-01 14:16:28 | 2021-10-09 23:36:29 |
| <input type="checkbox"/> | | | | SM-2021052 | 3 | 1 | 2021-05-15 14:16:28 | 2021-10-09 23:36:38 |
| <input type="checkbox"/> | | | | SM-2021054 | 3 | 1 | 2021-05-15 14:16:28 | 2021-10-09 23:36:38 |

- Tabel Pengadaan Sesudah

| | | | | id | pegawai_id | distributor_id | created_at | updated_at |
|--------------------------|--|--|--|-------------|------------|----------------|---------------------|---------------------|
| <input type="checkbox"/> | | | | SM-2021011 | 1 | 1 | 2021-01-01 14:16:28 | 2021-10-09 23:36:11 |
| <input type="checkbox"/> | | | | SM-2021012 | 1 | 1 | 2021-01-15 14:16:28 | 2021-10-09 23:36:13 |
| <input type="checkbox"/> | | | | SM-2021021 | 2 | 2 | 2021-02-01 14:16:28 | 2021-10-09 23:36:17 |
| <input type="checkbox"/> | | | | SM-2021022 | 1 | 1 | 2021-02-15 14:16:28 | 2021-10-09 23:36:15 |
| <input type="checkbox"/> | | | | SM-2021031 | 1 | 2 | 2021-03-01 14:16:28 | 2021-10-09 23:36:21 |
| <input type="checkbox"/> | | | | SM-2021032 | 3 | 1 | 2021-03-15 14:16:28 | 2021-10-09 23:36:27 |
| <input type="checkbox"/> | | | | SM-2021041 | 1 | 1 | 2021-04-01 14:16:28 | 2021-10-09 23:36:34 |
| <input type="checkbox"/> | | | | SM-2021042 | 1 | 2 | 2021-04-15 14:16:28 | 2021-10-09 23:36:31 |
| <input type="checkbox"/> | | | | SM-2021051 | 1 | 1 | 2021-05-01 14:16:28 | 2021-10-09 23:36:29 |
| <input type="checkbox"/> | | | | SM-2021052 | 3 | 1 | 2021-05-15 14:16:28 | 2021-10-09 23:36:38 |
| <input type="checkbox"/> | | | | SM-2021054 | 3 | 1 | 2021-05-15 14:16:28 | 2021-10-09 23:36:38 |
| <input type="checkbox"/> | | | | SM-20211250 | 1 | 1 | 2021-12-15 11:23:20 | 2021-12-15 11:23:20 |

- Tabel Pengadaan detail sebelum

| | | | | id | pengadaan_id | obat_id | jumlah | created_at | updated_at |
|--------------------------|--|--|--|----|--------------|---------|--------|---------------------|---------------------|
| <input type="checkbox"/> | | | | 10 | SM-2021052 | 3 | 1 | 2021-05-15 14:55:55 | 2021-10-09 23:35:21 |
| <input type="checkbox"/> | | | | 9 | SM-2021051 | 9 | 5 | 2021-05-01 14:55:55 | 2021-05-01 14:55:55 |
| <input type="checkbox"/> | | | | 8 | SM-2021042 | 8 | 8 | 2021-04-15 14:52:11 | 2021-04-15 14:52:11 |
| <input type="checkbox"/> | | | | 7 | SM-2021041 | 7 | 4 | 2021-04-01 14:52:11 | 2021-04-01 14:52:11 |
| <input type="checkbox"/> | | | | 6 | SM-2021032 | 6 | 5 | 2021-03-15 14:47:15 | 2021-03-15 14:47:15 |
| <input type="checkbox"/> | | | | 5 | SM-2021031 | 5 | 7 | 2021-03-01 14:47:15 | 2021-03-01 14:47:15 |
| <input type="checkbox"/> | | | | 4 | SM-2021022 | 4 | 5 | 2021-02-15 14:45:44 | 2021-02-15 14:45:44 |
| <input type="checkbox"/> | | | | 3 | SM-2021021 | 3 | 2 | 2021-02-01 14:45:44 | 2021-02-01 14:45:44 |
| <input type="checkbox"/> | | | | 2 | SM-2021012 | 2 | 3 | 2021-01-15 14:44:20 | 2021-01-15 14:44:20 |
| <input type="checkbox"/> | | | | 1 | SM-2021011 | 1 | 5 | 2021-01-01 14:44:20 | 2021-01-01 14:44:20 |

- Tabel Pendadaan detail sesudah

| | | | | | id | pengadaan_id | 1 | obat_id | jumlah | created_at | updated_at |
|--------------------------|--|--|--|--|----|--------------|---|---------|--------|---------------------|---------------------|
| <input type="checkbox"/> | | | | | 33 | SM-20211250 | | 1 | 5 | 2021-12-15 11:23:20 | 2021-12-15 11:23:20 |
| <input type="checkbox"/> | | | | | 34 | SM-20211250 | | 3 | 5 | 2021-12-15 11:23:20 | 2021-12-15 11:23:20 |
| <input type="checkbox"/> | | | | | 10 | SM-2021052 | | 3 | 1 | 2021-05-15 14:55:55 | 2021-10-09 23:35:21 |
| <input type="checkbox"/> | | | | | 9 | SM-2021051 | | 9 | 5 | 2021-05-01 14:55:55 | 2021-05-01 14:55:55 |
| <input type="checkbox"/> | | | | | 8 | SM-2021042 | | 8 | 8 | 2021-04-15 14:52:11 | 2021-04-15 14:52:11 |
| <input type="checkbox"/> | | | | | 7 | SM-2021041 | | 7 | 4 | 2021-04-01 14:52:11 | 2021-04-01 14:52:11 |
| <input type="checkbox"/> | | | | | 6 | SM-2021032 | | 6 | 5 | 2021-03-15 14:47:15 | 2021-03-15 14:47:15 |
| <input type="checkbox"/> | | | | | 5 | SM-2021031 | | 5 | 7 | 2021-03-01 14:47:15 | 2021-03-01 14:47:15 |
| <input type="checkbox"/> | | | | | 4 | SM-2021022 | | 4 | 5 | 2021-02-15 14:45:44 | 2021-02-15 14:45:44 |
| <input type="checkbox"/> | | | | | 3 | SM-2021021 | | 3 | 2 | 2021-02-01 14:45:44 | 2021-02-01 14:45:44 |
| <input type="checkbox"/> | | | | | 2 | SM-2021012 | | 2 | 3 | 2021-01-15 14:44:20 | 2021-01-15 14:44:20 |
| <input type="checkbox"/> | | | | | 1 | SM-2021011 | | 1 | 5 | 2021-01-01 14:44:20 | 2021-01-01 14:44:20 |

- Tabel Obat sebelum

| | | | | | id | nama | stok | jenis_id | satuan_id | harga_beli | harga_jual | status | created_at | updated_at |
|--------------------------|--|--|--|--|----|-----------------|------|----------|-----------|------------|------------|--------|---------------------|---------------------|
| <input type="checkbox"/> | | | | | 1 | Paracetamol | 45 | 2 | 2 | 2500 | 5000 | 1 | 2021-10-07 12:34:48 | 2021-12-10 11:01:54 |
| <input type="checkbox"/> | | | | | 2 | Kataflam | 0 | 2 | 2 | 10000 | 15000 | 1 | 2021-10-07 12:41:44 | 2021-10-07 12:41:44 |
| <input type="checkbox"/> | | | | | 3 | Antimo | 26 | 1 | 2 | 5000 | 7500 | 1 | 2021-10-07 12:41:44 | 2021-12-10 11:01:54 |
| <input type="checkbox"/> | | | | | 4 | Tramadol | 5 | 1 | 1 | 10000 | 15000 | 1 | 2021-10-07 12:49:07 | 2021-12-10 11:01:54 |
| <input type="checkbox"/> | | | | | 5 | PIROXICAM | 5 | 2 | 1 | 100000 | 150000 | 1 | 2021-10-09 13:38:36 | 2021-12-10 11:01:54 |
| <input type="checkbox"/> | | | | | 6 | Hydrocorti | 1 | 6 | 2 | 10000 | 13000 | 1 | 2021-10-09 13:38:36 | 2021-10-09 16:38:20 |
| <input type="checkbox"/> | | | | | 7 | Acyclovir Cream | 1 | 6 | 2 | 7000 | 10000 | 1 | 2021-10-09 13:40:26 | 2021-10-09 16:38:17 |
| <input type="checkbox"/> | | | | | 8 | Ethambutol | 2 | 2 | 2 | 20000 | 21000 | 1 | 2021-10-09 13:40:26 | 2021-10-09 16:38:13 |
| <input type="checkbox"/> | | | | | 9 | Promag | 5 | 2 | 1 | 13000 | 15000 | 1 | 2021-10-09 13:43:41 | 2021-10-09 16:38:10 |
| <input type="checkbox"/> | | | | | 10 | Nebacetin | 4 | 5 | 2 | 20000 | 25000 | 1 | 2021-10-09 13:43:41 | 2021-10-09 16:38:05 |

- Tabel obat sesudah

| | | | | | id | nama | stok | jenis_id | satuan_id | harga_beli | harga_jual | status | created_at | updated_at |
|--------------------------|--|--|--|--|----|-----------------|------|----------|-----------|------------|------------|--------|---------------------|---------------------|
| <input type="checkbox"/> | | | | | 1 | Paracetamol | 50 | 2 | 2 | 2500 | 5000 | 1 | 2021-10-07 12:34:48 | 2021-12-15 11:23:20 |
| <input type="checkbox"/> | | | | | 2 | Kataflam | 0 | 2 | 2 | 10000 | 15000 | 1 | 2021-10-07 12:41:44 | 2021-10-07 12:41:44 |
| <input type="checkbox"/> | | | | | 3 | Antimo | 31 | 1 | 2 | 5000 | 7500 | 1 | 2021-10-07 12:41:44 | 2021-12-15 11:23:20 |
| <input type="checkbox"/> | | | | | 4 | Tramadol | 5 | 1 | 1 | 10000 | 15000 | 1 | 2021-10-07 12:49:07 | 2021-12-10 11:01:54 |
| <input type="checkbox"/> | | | | | 5 | PIROXICAM | 5 | 2 | 1 | 100000 | 150000 | 1 | 2021-10-09 13:38:36 | 2021-12-10 11:01:54 |
| <input type="checkbox"/> | | | | | 6 | Hydrocorti | 1 | 6 | 2 | 10000 | 13000 | 1 | 2021-10-09 13:38:36 | 2021-10-09 16:38:20 |
| <input type="checkbox"/> | | | | | 7 | Acyclovir Cream | 1 | 6 | 2 | 7000 | 10000 | 1 | 2021-10-09 13:40:26 | 2021-10-09 16:38:17 |
| <input type="checkbox"/> | | | | | 8 | Ethambutol | 2 | 2 | 2 | 20000 | 21000 | 1 | 2021-10-09 13:40:26 | 2021-10-09 16:38:13 |
| <input type="checkbox"/> | | | | | 9 | Promag | 5 | 2 | 1 | 13000 | 15000 | 1 | 2021-10-09 13:43:41 | 2021-10-09 16:38:10 |
| <input type="checkbox"/> | | | | | 10 | Nebacetin | 4 | 5 | 2 | 20000 | 25000 | 1 | 2021-10-09 13:43:41 | 2021-10-09 16:38:05 |

- Hasil query dari sintaks diatas

| + Options | | | | | | |
|-------------|-------------|-----------|---------------|---------------|----------------|------------------|
| id | obat_nama | stok_asal | tambah_jumlah | stok_sekarang | pegawai_nama | distributor_nama |
| SM-20211250 | Paracetamol | 45 | 5 | 50 | Isep Lutpi Nur | Pt Kimia farma |
| SM-20211250 | Antimo | 26 | 5 | 31 | Isep Lutpi Nur | Pt Kimia farma |

2. Transaksi Error/ Tidak normal

a) Sintaks

```
START TRANSACTION; -- Start
SET @pengadaan_id = 'SM-20211251';
SET @pegawai_id = 1; -- Isep Lutpi
SET @distributor_id = 1; -- Pt Kimia Farma

-- Header
CALL insertPengadaanHeader(@pengadaan_id, @pegawai_id, @distributor_id);

-- Body
SET @obat = 50; -- Obat tidak ada
SET @jumlah = 5;
CALL insertPengadaanBody(@pengadaan_id, @obat, @jumlah);

SET @obat = 3; -- Antimo
SET @jumlah = 5;
CALL insertPengadaanBody(@pengadaan_id, @obat, @jumlah);

-- View
CALL insertPengadaanView(@pengadaan_id);

COMMIT; -- End
```

b) Hasil

Error

SQL query: [Copy](#)

CALL insertPengadaanBody(@pengadaan_id, @obat, @jumlah);

MySQL said: 

#1452 - Cannot add or update a child row: a foreign key constraint fails (`apotik`.`pengadaan_detail`, CONSTRAINT `pengadaan_detail_ibfk_2` FOREIGN KEY (`obat_id`) REFERENCES `obat` (`id`) ON DELETE CASCADE)

Tabel pengadaan, pengadaan detail dan obat tetap sama tidak ada perubahan

B. Contoh kasus transaksi dengan rollback

1. Transaksi Normal

a) Sintaks

```
SET @nama_jenis = 'Tes Tes';
SET @keterangan = 'Keterangan';
set @status = 1; -- 0 = tidak aktif | 1 = aktif
CALL insertJenis(@nama_jenis, @keterangan, @status);
```

b) Hasil

- Tabel Jenis Sebelum

| | | id | nama | keterangan | status | created_at | updated_at |
|--------------------------|------------------|-------------------------|--------|------------|--------|---------------------|---------------------|
| | | 0 Tidak Aktif 1 Aktif | | | | | |
| <input type="checkbox"/> | Edit Copy Delete | 1 | Cair | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 2 | Tablet | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 3 | Kapsul | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 4 | Pill | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 5 | Serbuk | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 6 | Salep | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 7 | Tetes | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |

- Tabel Jenis Sesudah

| | | id | nama | keterangan | status | created_at | updated_at |
|--------------------------|------------------|-------------------------|---------|------------|--------|---------------------|---------------------|
| | | 0 Tidak Aktif 1 Aktif | | | | | |
| <input type="checkbox"/> | Edit Copy Delete | 1 | Cair | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 2 | Tablet | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 3 | Kapsul | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 4 | Pill | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 5 | Serbuk | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 6 | Salep | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 7 | Tetes | ket | 1 | 2021-10-07 12:31:45 | 2021-10-07 12:31:45 |
| <input type="checkbox"/> | Edit Copy Delete | 16 | Tes Tes | Keterangan | 1 | 2021-12-15 11:50:12 | 2021-12-15 11:50:12 |

- Hasil Query

Options
result
Jenis berhasil disimpan

2. Transaksi Error/ Tidak Normal

a) Sintaks

```
SET @nama_jenis = 'Cair'; -- Cair sudah ada
SET @keterangan = 'Keterangan';
set @status = 1; -- 0 = tidak aktif | 1 = aktif
CALL insertJenis(@nama_jenis, @keterangan, @status);
```

b) Hasil

Dalam query ini tidak ada perubahan dalam tabel jenis.

Hasil Query

result
Nama Jenis Sudah Digunakan

C. Coonth kasus transaksi dengan checkpoint

1. Sintaks

```
START TRANSACTION; -- Start
SET @penjualan_id = 'SK-2021216';
SET @pegawai_id = 1;
SET @pembeli_id = 1;

-- Header
CALL insertPenjualanHeader(@penjualan_id, @pegawai_id, @pembeli_id);

-- Body
SET @obat = 1; -- Paracetamol
SET @jumlah = 5;
CALL insertPenjualanBody(@penjualan_id, @obat, @jumlah);

SAVEPOINT Paracetamol;

SET @obat = 3; -- Antimo
SET @jumlah = 4;
CALL insertPenjualanBody(@penjualan_id, @obat, @jumlah);

ROLLBACK TO SAVEPOINT Paracetamol;































SET @obat = 4; -- Tramadol
SET @jumlah = 2;
CALL insertPenjualanBody(@penjualan_id, @obat, @jumlah);

-- View
CALL insertPenjualanView(@penjualan_id);

COMMIT; -- End
```

2. Hasil

- Tabel penjualan sebelum

| | | | | id | pegawai_id | pembeli_id | created_at | updated_at |
|--------------------------|--|--|--|------------|------------|------------|---------------------|---------------------|
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021011 | 4 | NULL | 2021-01-06 15:00:34 | 2021-10-09 16:03:13 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021012 | 2 | NULL | 2021-01-08 15:00:34 | 2021-10-09 16:03:07 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021021 | 1 | 4 | 2021-02-04 15:00:34 | 2021-10-09 15:50:53 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021022 | 3 | NULL | 2021-02-06 15:00:34 | 2021-10-09 15:52:30 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021031 | 1 | NULL | 2021-03-07 15:00:34 | 2021-10-09 16:03:19 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021032 | 2 | 2 | 2021-03-15 15:00:34 | 2021-10-09 15:51:19 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021041 | 3 | 4 | 2021-04-09 15:00:34 | 2021-10-09 15:51:27 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021042 | 2 | 1 | 2021-04-20 15:00:34 | 2021-10-09 15:51:35 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021051 | 1 | NULL | 2021-05-13 15:00:34 | 2021-10-09 15:52:40 |
| <input type="checkbox"/> |  Edit |  Copy |  Delete | SK-2021052 | 4 | 2 | 2021-05-16 15:00:34 | 2021-10-09 15:51:55 |

- Tabel Penjualan sesudah

| | | | | | id | pegawai_id | pembeli_id | created_at | updated_at |
|--------------------------|--|--|--|------|------------|------------|------------|---------------------|---------------------|
| <input type="checkbox"/> | | | | Edit | SK-2021011 | 4 | NULL | 2021-01-06 15:00:34 | 2021-10-09 16:03:13 |
| <input type="checkbox"/> | | | | Edit | SK-2021012 | 2 | NULL | 2021-01-08 15:00:34 | 2021-10-09 16:03:07 |
| <input type="checkbox"/> | | | | Edit | SK-2021021 | 1 | 4 | 2021-02-04 15:00:34 | 2021-10-09 15:50:53 |
| <input type="checkbox"/> | | | | Edit | SK-2021022 | 3 | NULL | 2021-02-06 15:00:34 | 2021-10-09 15:52:30 |
| <input type="checkbox"/> | | | | Edit | SK-2021031 | 1 | NULL | 2021-03-07 15:00:34 | 2021-10-09 16:03:19 |
| <input type="checkbox"/> | | | | Edit | SK-2021032 | 2 | 2 | 2021-03-15 15:00:34 | 2021-10-09 15:51:19 |
| <input type="checkbox"/> | | | | Edit | SK-2021041 | 3 | 4 | 2021-04-09 15:00:34 | 2021-10-09 15:51:27 |
| <input type="checkbox"/> | | | | Edit | SK-2021042 | 2 | 1 | 2021-04-20 15:00:34 | 2021-10-09 15:51:35 |
| <input type="checkbox"/> | | | | Edit | SK-2021051 | 1 | NULL | 2021-05-13 15:00:34 | 2021-10-09 15:52:40 |
| <input type="checkbox"/> | | | | Edit | SK-2021052 | 4 | 2 | 2021-05-16 15:00:34 | 2021-10-09 15:51:55 |
| <input type="checkbox"/> | | | | Edit | SK-2021216 | 1 | 1 | 2021-12-15 12:06:10 | 2021-12-15 12:06:10 |

- Tabel Penjualan detail sebelum

| | | | | | id | penjualan_id | obat_id | jumlah | created_at | updated_at |
|--------------------------|--|--|--|------|----|--------------|---------|--------|---------------------|---------------------|
| <input type="checkbox"/> | | | | Edit | 11 | SK-2021011 | 1 | 1 | 2021-01-06 00:00:00 | 2021-01-06 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 12 | SK-2021011 | 3 | 1 | 2021-01-06 00:00:00 | 2021-01-06 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 13 | SK-2021011 | 4 | 3 | 2021-01-06 00:00:00 | 2021-01-06 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 14 | SK-2021012 | 1 | 2 | 2021-08-01 00:00:00 | 2021-08-01 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 15 | SK-2021012 | 2 | 1 | 2021-08-01 00:00:00 | 2021-08-01 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 16 | SK-2021021 | 1 | 1 | 2021-02-04 00:00:00 | 2021-02-04 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 17 | SK-2021021 | 2 | 1 | 2021-02-04 00:00:00 | 2021-02-04 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 18 | SK-2021021 | 3 | 1 | 2021-02-04 00:00:00 | 2021-02-04 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 19 | SK-2021021 | 4 | 2 | 2021-02-04 00:00:00 | 2021-02-04 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 20 | SK-2021022 | 5 | 1 | 2021-02-06 00:00:00 | 2021-02-06 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 21 | SK-2021022 | 6 | 1 | 2021-02-06 00:00:00 | 2021-02-06 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 22 | SK-2021031 | 5 | 1 | 2021-03-07 00:00:00 | 2021-03-07 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 23 | SK-2021031 | 6 | 1 | 2021-03-07 00:00:00 | 2021-03-07 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 24 | SK-2021032 | 5 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 25 | SK-2021032 | 6 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 26 | SK-2021032 | 7 | 3 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 27 | SK-2021032 | 8 | 2 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 28 | SK-2021041 | 5 | 1 | 2021-09-04 00:00:00 | 2021-09-04 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 29 | SK-2021041 | 6 | 1 | 2021-09-04 00:00:00 | 2021-09-04 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 30 | SK-2021042 | 5 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 31 | SK-2021042 | 8 | 2 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 32 | SK-2021051 | 5 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 33 | SK-2021051 | 8 | 2 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | Edit | 34 | SK-2021052 | 5 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |

- Tabel Penjualan detail sesudah

| | | | | id | penjualan_id | obat_id | jumlah | created_at | updated_at |
|--------------------------|--|--|--|----|--------------|---------|--------|---------------------|---------------------|
| <input type="checkbox"/> | | | | 47 | SK-2021216 | 1 | 5 | 2021-12-15 12:06:10 | 2021-12-15 12:06:10 |
| <input type="checkbox"/> | | | | 49 | SK-2021216 | 4 | 2 | 2021-12-15 12:06:10 | 2021-12-15 12:06:10 |
| <input type="checkbox"/> | | | | 34 | SK-2021052 | 5 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 32 | SK-2021051 | 5 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 33 | SK-2021051 | 8 | 2 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 30 | SK-2021042 | 5 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 31 | SK-2021042 | 8 | 2 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 28 | SK-2021041 | 5 | 1 | 2021-09-04 00:00:00 | 2021-09-04 00:00:00 |
| <input type="checkbox"/> | | | | 29 | SK-2021041 | 6 | 1 | 2021-09-04 00:00:00 | 2021-09-04 00:00:00 |
| <input type="checkbox"/> | | | | 24 | SK-2021032 | 5 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 25 | SK-2021032 | 6 | 1 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 26 | SK-2021032 | 7 | 3 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 27 | SK-2021032 | 8 | 2 | 0000-00-00 00:00:00 | 0000-00-00 00:00:00 |
| <input type="checkbox"/> | | | | 22 | SK-2021031 | 5 | 1 | 2021-03-07 00:00:00 | 2021-03-07 00:00:00 |
| <input type="checkbox"/> | | | | 23 | SK-2021031 | 6 | 1 | 2021-03-07 00:00:00 | 2021-03-07 00:00:00 |
| <input type="checkbox"/> | | | | 20 | SK-2021022 | 5 | 1 | 2021-02-06 00:00:00 | 2021-02-06 00:00:00 |
| <input type="checkbox"/> | | | | 21 | SK-2021022 | 6 | 1 | 2021-02-06 00:00:00 | 2021-02-06 00:00:00 |
| <input type="checkbox"/> | | | | 16 | SK-2021021 | 1 | 1 | 2021-02-04 00:00:00 | 2021-02-04 00:00:00 |
| <input type="checkbox"/> | | | | 17 | SK-2021021 | 2 | 1 | 2021-02-04 00:00:00 | 2021-02-04 00:00:00 |
| <input type="checkbox"/> | | | | 18 | SK-2021021 | 3 | 1 | 2021-02-04 00:00:00 | 2021-02-04 00:00:00 |
| <input type="checkbox"/> | | | | 19 | SK-2021021 | 4 | 2 | 2021-02-04 00:00:00 | 2021-02-04 00:00:00 |
| <input type="checkbox"/> | | | | 14 | SK-2021012 | 1 | 2 | 2021-08-01 00:00:00 | 2021-08-01 00:00:00 |
| <input type="checkbox"/> | | | | 15 | SK-2021012 | 2 | 1 | 2021-08-01 00:00:00 | 2021-08-01 00:00:00 |
| <input type="checkbox"/> | | | | 11 | SK-2021011 | 1 | 1 | 2021-01-06 00:00:00 | 2021-01-06 00:00:00 |
| <input type="checkbox"/> | | | | 12 | SK-2021011 | 3 | 1 | 2021-01-06 00:00:00 | 2021-01-06 00:00:00 |

- Tabel Obat sebelum

| | | | | id | nama | stok | jenis_id | satuan_id | harga_beli | harga_jual | status | created_at | updated_at |
|--------------------------|--|--|--|----|-----------------|------|----------|-----------|------------|------------|--------|---------------------|---------------------|
| <input type="checkbox"/> | | | | 1 | Paracetamol | 50 | 2 | 2 | 2500 | 5000 | 1 | 2021-10-07 12:34:48 | 2021-12-15 11:23:20 |
| <input type="checkbox"/> | | | | 2 | Kataflam | 0 | 2 | 2 | 10000 | 15000 | 1 | 2021-10-07 12:41:44 | 2021-10-07 12:41:44 |
| <input type="checkbox"/> | | | | 3 | Antimo | 31 | 1 | 2 | 5000 | 7500 | 1 | 2021-10-07 12:41:44 | 2021-12-15 11:23:20 |
| <input type="checkbox"/> | | | | 4 | Tramadol | 5 | 1 | 1 | 10000 | 15000 | 1 | 2021-10-07 12:49:07 | 2021-12-10 11:01:54 |
| <input type="checkbox"/> | | | | 5 | PIROXICAM | 5 | 2 | 1 | 100000 | 150000 | 1 | 2021-10-09 13:38:36 | 2021-12-10 11:01:54 |
| <input type="checkbox"/> | | | | 6 | Hydrocorti | 1 | 6 | 2 | 10000 | 13000 | 1 | 2021-10-09 13:38:36 | 2021-10-09 16:38:20 |
| <input type="checkbox"/> | | | | 7 | Acyclovir Cream | 1 | 6 | 2 | 7000 | 10000 | 1 | 2021-10-09 13:40:26 | 2021-10-09 16:38:17 |
| <input type="checkbox"/> | | | | 8 | Ethambutol | 2 | 2 | 2 | 20000 | 21000 | 1 | 2021-10-09 13:40:26 | 2021-10-09 16:38:13 |
| <input type="checkbox"/> | | | | 9 | Promag | 5 | 2 | 1 | 13000 | 15000 | 1 | 2021-10-09 13:43:41 | 2021-10-09 16:38:10 |
| <input type="checkbox"/> | | | | 10 | Nebacetin | 4 | 5 | 2 | 20000 | 25000 | 1 | 2021-10-09 13:43:41 | 2021-10-09 16:38:05 |

- Tabel Obat sesudah

| | | | | | | | | | | | status | | created_at | updated_at |
|--------------------------|--|----|------|------|-----------------|-----------|------------|------------|--------|--------|-------------------------|---------------------|---------------------|------------|
| | | | | | | | | | | | 0 Tidak Aktif 1 Aktif | | | |
| | | id | nama | stok | jenis_id | satuan_id | harga_beli | harga_jual | | | | | | |
| <input type="checkbox"/> | | | | 1 | Paracetamol | 45 | 2 | 2 | 2500 | 5000 | 1 | 2021-10-07 12:34:48 | 2021-12-15 12:06:10 | 0 |
| <input type="checkbox"/> | | | | 2 | Kataflam | 0 | 2 | 2 | 10000 | 15000 | 1 | 2021-10-07 12:41:44 | 2021-10-07 12:41:44 | |
| <input type="checkbox"/> | | | | 3 | Antimo | 31 | 1 | 2 | 5000 | 7500 | 1 | 2021-10-07 12:41:44 | 2021-12-15 11:23:20 | |
| <input type="checkbox"/> | | | | 4 | Tramadol | 3 | 1 | 1 | 10000 | 15000 | 1 | 2021-10-07 12:49:07 | 2021-12-15 12:06:10 | 0 |
| <input type="checkbox"/> | | | | 5 | PIROXICAM | 5 | 2 | 1 | 100000 | 150000 | 1 | 2021-10-09 13:38:36 | 2021-12-10 11:01:54 | |
| <input type="checkbox"/> | | | | 6 | Hydrocorti | 1 | 6 | 2 | 10000 | 13000 | 1 | 2021-10-09 13:38:36 | 2021-10-09 16:38:20 | |
| <input type="checkbox"/> | | | | 7 | Acyclovir Cream | 1 | 6 | 2 | 7000 | 10000 | 1 | 2021-10-09 13:40:26 | 2021-10-09 16:38:17 | |
| <input type="checkbox"/> | | | | 8 | Ethambutol | 2 | 2 | 2 | 20000 | 21000 | 1 | 2021-10-09 13:40:26 | 2021-10-09 16:38:13 | |
| <input type="checkbox"/> | | | | 9 | Promag | 5 | 2 | 1 | 13000 | 15000 | 1 | 2021-10-09 13:43:41 | 2021-10-09 16:38:10 | |
| <input type="checkbox"/> | | | | 10 | Nebacetin | 4 | 5 | 2 | 20000 | 25000 | 1 | 2021-10-09 13:43:41 | 2021-10-09 16:38:05 | |