Nama : Wildan Kamal Allam
NIM : 24060120140126

```sql
-- MySQL dump 10.13  Distrib 8.0.27, for Win64 (x86_64)
--
-- Host: localhost    Database: venture
-- ------------------------------------------------------
-- Server version       8.0.27

/*!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 */;
/*!50503 SET NAMES utf8 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0
*/;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS,
FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE,
SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;


--
-- Table structure for table `investor`
--

DROP TABLE IF EXISTS `investor`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `investor` (
  `idInvestor` int NOT NULL,
  `nama` varchar(100) NOT NULL,
  `umur` int NOT NULL,
  `nickname` varchar(45) NOT NULL,
  PRIMARY KEY (`idInvestor`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;


--
-- Dumping data for table `investor`
--

LOCK TABLES `investor` WRITE;
/*!40000 ALTER TABLE `investor` DISABLE KEYS */;
INSERT INTO `investor` VALUES
(661030201,'eve',21,'eve'),(661030202,'ina',22,'Eros'),(661030203,
'anto',23,'Zeins'),(661030204,'Firda',20,'Zenith'),(661030205,'Mak
i',20,'Zennin'),(661030206,'Nozomi',21,'Koiii'),(661030207,'Guruh'
,22,'Catto'),(661030208,'Alfheim',16,'Vethra'),(661030209,'Siti
Qomariyah',20,'Mariah'),(661030210,'Jaka Sembung',23,'Jack');
/*!40000 ALTER TABLE `investor` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `log_project`
```

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```
--

DROP TABLE IF EXISTS `log_project`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `log_project` (
  `id_log` int NOT NULL AUTO_INCREMENT,
  `nilai_lama` int NOT NULL,
  `nilai_baru` int NOT NULL,
  `waktu` date NOT NULL,
  `nama_project` varchar(100) DEFAULT NULL,
  PRIMARY KEY (`id_log`)
) ENGINE=InnoDB AUTO_INCREMENT=50 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `log_project`
--

LOCK TABLES `log_project` WRITE;
/*!40000 ALTER TABLE `log_project` DISABLE KEYS */;
INSERT INTO `log_project` VALUES (1,50000,45000,'2022-02-
26',NULL),(2,45000,50000,'2022-02-26',NULL),(3,45000,60000,'2022-
02-26',NULL),(4,23000,25000,'2022-02-
26','Near'),(5,60000,30000,'2022-02-
26','Solana'),(6,30000,30000,'2022-02-
26','Solana'),(7,25000,25000,'2022-02-
26','Near'),(8,50000,50000,'2022-02-
26','Axie'),(9,12000,12000,'2022-02-
26','Affyn'),(10,65000,65000,'2022-02-
26','Azuki'),(11,29000,29000,'2022-02-
26','Karafuru'),(12,46000,46000,'2022-02-
26','Kadena'),(13,65000,65000,'2022-02-
26','Layer2BTC'),(14,45500,45500,'2022-02-
26','Aurora'),(15,78000,78000,'2022-02-
26','Eizperchain'),(16,30000,30000,'2022-02-
26','Solana'),(17,25000,25000,'2022-02-
26','Near'),(18,50000,50000,'2022-02-
26','Axie'),(19,12000,12000,'2022-02-
26','Affyn'),(20,65000,65000,'2022-02-
26','Azuki'),(21,29000,29000,'2022-02-
26','Karafuru'),(22,46000,46000,'2022-02-
26','Kadena'),(23,65000,65000,'2022-02-
26','Layer2BTC'),(24,45500,45500,'2022-02-
26','Aurora'),(25,78000,78000,'2022-02-
26','Eizperchain'),(26,30000,30000,'2022-02-
26','Solana'),(27,25000,25000,'2022-02-
26','Near'),(28,50000,50000,'2022-02-
26','Axie'),(29,12000,12000,'2022-02-
26','Affyn'),(30,65000,65000,'2022-02-
26','Azuki'),(31,29000,29000,'2022-02-
26','Karafuru'),(32,46000,46000,'2022-02-
26','Kadena'),(33,65000,65000,'2022-02-
26','Layer2BTC'),(34,45500,45500,'2022-02-
```

```
26','Aurora'),(35,78000,78000,'2022-02-
26','Eizperchain'),(36,30000,30000,'2022-02-
26','Solana'),(37,25000,25000,'2022-02-
26','Near'),(38,50000,50000,'2022-02-
26','Axie'),(39,12000,12000,'2022-02-
26','Affyn'),(40,65000,65000,'2022-02-
26','Azuki'),(41,29000,29000,'2022-02-
26','Karafuru'),(42,46000,46000,'2022-02-
26','Kadena'),(43,65000,65000,'2022-02-
26','Layer2BTC'),(44,45500,45500,'2022-02-
26','Aurora'),(45,78000,78000,'2022-02-
26','Eizperchain'),(48,30000,50000,'2022-02-26','Solana');
/*!40000 ALTER TABLE `log_project` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `project`
--

DROP TABLE IF EXISTS `project`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `project` (
  `idProject` int NOT NULL,
  `nama_project` varchar(100) NOT NULL,
  `nilai_project` int NOT NULL,
  `penanggungjawab` int NOT NULL,
  PRIMARY KEY (`idProject`),
  KEY `Penanggung_Jawab_idx` (`penanggungjawab`),
  CONSTRAINT `penanggungjawab` FOREIGN KEY (`penanggungjawab`)
REFERENCES `investor` (`idInvestor`),
  CONSTRAINT `project_chk_1` CHECK ((`nilai_project` > 0))
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `project`
--

LOCK TABLES `project` WRITE;
/*!40000 ALTER TABLE `project` DISABLE KEYS */;
INSERT INTO `project` VALUES
(1,'Solana',50000,661030201),(2,'Near',25000,661030202),(3,'Axie',
50000,661030203),(4,'Affyn',12000,661030204),(5,'Azuki',65000,6610
30205),(6,'Karafuru',29000,661030206),(7,'Kadena',46000,661030207)
,(8,'Layer2BTC',65000,661030208),(9,'Aurora',45500,661030209),(10,
'Eizperchain',78000,661030210);
/*!40000 ALTER TABLE `project` ENABLE KEYS */;
UNLOCK TABLES;
/*!50003 SET @saved_cs_client      = @@character_set_client */ ;
/*!50003 SET @saved_cs_results     = @@character_set_results */ ;
/*!50003 SET @saved_col_connection = @@collation_connection */ ;
/*!50003 SET character_set_client  = utf8mb4 */ ;
/*!50003 SET character_set_results = utf8mb4 */ ;
```

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```
/*!50003 SET collation_connection  = utf8mb4_0900_ai_ci */ ;
/*!50003 SET @saved_sql_mode       = @@sql_mode */ ;
/*!50003 SET sql_mode              =
'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */ ;
DELIMITER ;;
/*!50003 CREATE*/ /*!50017 DEFINER=`root`@`localhost`*/ /*!50003
TRIGGER `update_nilai_project` BEFORE UPDATE ON `project` FOR EACH
ROW BEGIN
    INSERT INTO log_project
    set nilai_lama = old.nilai_project,
    nilai_baru = new.nilai_project,
    waktu = NOW(),
    nama_project = old.nama_project;
END */;;
DELIMITER ;
/*!50003 SET sql_mode              = @saved_sql_mode */ ;
/*!50003 SET character_set_client  = @saved_cs_client */ ;
/*!50003 SET character_set_results = @saved_cs_results */ ;
/*!50003 SET collation_connection  = @saved_col_connection */ ;

--
-- Table structure for table `vesting`
--

DROP TABLE IF EXISTS `vesting`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `vesting` (
  `vesting_id` int NOT NULL,
  `project_id` int NOT NULL,
  `vesting_percentage` int NOT NULL,
  PRIMARY KEY (`vesting_id`),
  KEY `project_id_idx` (`project_id`),
  CONSTRAINT `project_id` FOREIGN KEY (`project_id`) REFERENCES
`project` (`idProject`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `vesting`
--

LOCK TABLES `vesting` WRITE;
/*!40000 ALTER TABLE `vesting` DISABLE KEYS */;
INSERT INTO `vesting` VALUES
(10,1,25),(20,2,35),(30,3,66),(40,4,22),(50,5,21),(60,6,50),(70,7,
5),(80,8,89),(90,9,45),(100,10,60);
/*!40000 ALTER TABLE `vesting` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Table structure for table `vesting_release`
--
```

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```sql
DROP TABLE IF EXISTS `vesting_release`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `vesting_release` (
  `idProject` int NOT NULL,
  `nama_project` varchar(100) NOT NULL,
  `nilai_project` int NOT NULL,
  `penanggungjawab` int NOT NULL,
  `percetage` int DEFAULT NULL,
  `belum_cair` int DEFAULT NULL,
  `sudah_cair` int DEFAULT NULL,
  PRIMARY KEY (`idProject`),
  KEY `Penanggung_Jawab_idx` (`penanggungjawab`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `vesting_release`
--

LOCK TABLES `vesting_release` WRITE;
/*!40000 ALTER TABLE `vesting_release` DISABLE KEYS */;
INSERT INTO `vesting_release` VALUES
(1,'Solana',50000,661030201,25,50000,0),(2,'Near',25000,661030202,
35,25000,0),(3,'Axie',50000,661030203,66,50000,0),(4,'Affyn',12000
,661030204,22,12000,0),(5,'Azuki',65000,661030205,21,65000,0),(6,'
Karafuru',29000,661030206,50,29000,0),(7,'Kadena',46000,661030207,
5,46000,0),(8,'Layer2BTC',65000,661030208,89,65000,0),(9,'Aurora',
45500,661030209,45,45500,0),(10,'Eizperchain',78000,661030210,60,7
8000,0);
/*!40000 ALTER TABLE `vesting_release` ENABLE KEYS */;
UNLOCK TABLES;

--
-- Dumping events for database 'venture'
--


--
-- Dumping routines for database 'venture'
--
/*!50003 DROP PROCEDURE IF EXISTS `backup_start` */;
/*!50003 SET @saved_cs_client      = @@character_set_client */ ;
/*!50003 SET @saved_cs_results     = @@character_set_results */ ;
/*!50003 SET @saved_col_connection = @@collation_connection */ ;
/*!50003 SET character_set_client  = utf8mb4 */ ;
/*!50003 SET character_set_results = utf8mb4 */ ;
/*!50003 SET collation_connection  = utf8mb4_0900_ai_ci */ ;
/*!50003 SET @saved_sql_mode       = @@sql_mode */ ;
/*!50003 SET sql_mode              =
'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */ ;
DELIMITER ;;
CREATE DEFINER=`root`@`localhost` PROCEDURE `backup_start`()
BEGIN
INSERT INTO project_backup SELECT * FROM project;
```

```
END ;;
DELIMITER ;
/*!50003 SET sql_mode              = @saved_sql_mode */ ;
/*!50003 SET character_set_client  = @saved_cs_client */ ;
/*!50003 SET character_set_results = @saved_cs_results */ ;
/*!50003 SET collation_connection  = @saved_col_connection */ ;
/*!50003 DROP PROCEDURE IF EXISTS `dropcolumnbackup` */;
/*!50003 SET @saved_cs_client      = @@character_set_client */ ;
/*!50003 SET @saved_cs_results     = @@character_set_results */ ;
/*!50003 SET @saved_col_connection = @@collation_connection */ ;
/*!50003 SET character_set_client  = utf8mb4 */ ;
/*!50003 SET character_set_results = utf8mb4 */ ;
/*!50003 SET collation_connection  = utf8mb4_0900_ai_ci */ ;
/*!50003 SET @saved_sql_mode       = @@sql_mode */ ;
/*!50003 SET sql_mode              =
'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */ ;
DELIMITER ;;
CREATE DEFINER=`root`@`localhost` PROCEDURE `dropcolumnbackup`()
BEGIN
DELETE FROM project_backup;
END ;;
DELIMITER ;
/*!50003 SET sql_mode              = @saved_sql_mode */ ;
/*!50003 SET character_set_client  = @saved_cs_client */ ;
/*!50003 SET character_set_results = @saved_cs_results */ ;
/*!50003 SET collation_connection  = @saved_col_connection */ ;
/*!50003 DROP PROCEDURE IF EXISTS `insertinvestor` */;
/*!50003 SET @saved_cs_client      = @@character_set_client */ ;
/*!50003 SET @saved_cs_results     = @@character_set_results */ ;
/*!50003 SET @saved_col_connection = @@collation_connection */ ;
/*!50003 SET character_set_client  = utf8mb4 */ ;
/*!50003 SET character_set_results = utf8mb4 */ ;
/*!50003 SET collation_connection  = utf8mb4_0900_ai_ci */ ;
/*!50003 SET @saved_sql_mode       = @@sql_mode */ ;
/*!50003 SET sql_mode              =
'STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION' */ ;
DELIMITER ;;
CREATE DEFINER=`root`@`localhost` PROCEDURE `insertinvestor`(
     idInvestor INT,
    nama VARCHAR(100),
    umur INT,
    nickname VARCHAR(45)
)
BEGIN
    INSERT INTO investor
    VALUES (idInvestor, nama, umur, nickname);
END ;;
DELIMITER ;
/*!50003 SET sql_mode              = @saved_sql_mode */ ;
/*!50003 SET character_set_client  = @saved_cs_client */ ;
/*!50003 SET character_set_results = @saved_cs_results */ ;
/*!50003 SET collation_connection  = @saved_col_connection */ ;
/*!40103 SET TIME_ZONE=@OLD_TIME_ZONE */;

/*!40101 SET SQL_MODE=@OLD_SQL_MODE */;
```

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```
/*!40014 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS */;
/*!40014 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS */;
/*!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 */;
/*!40111 SET SQL_NOTES=@OLD_SQL_NOTES */;

-- Dump completed on 2022-02-27  0:20:14
```
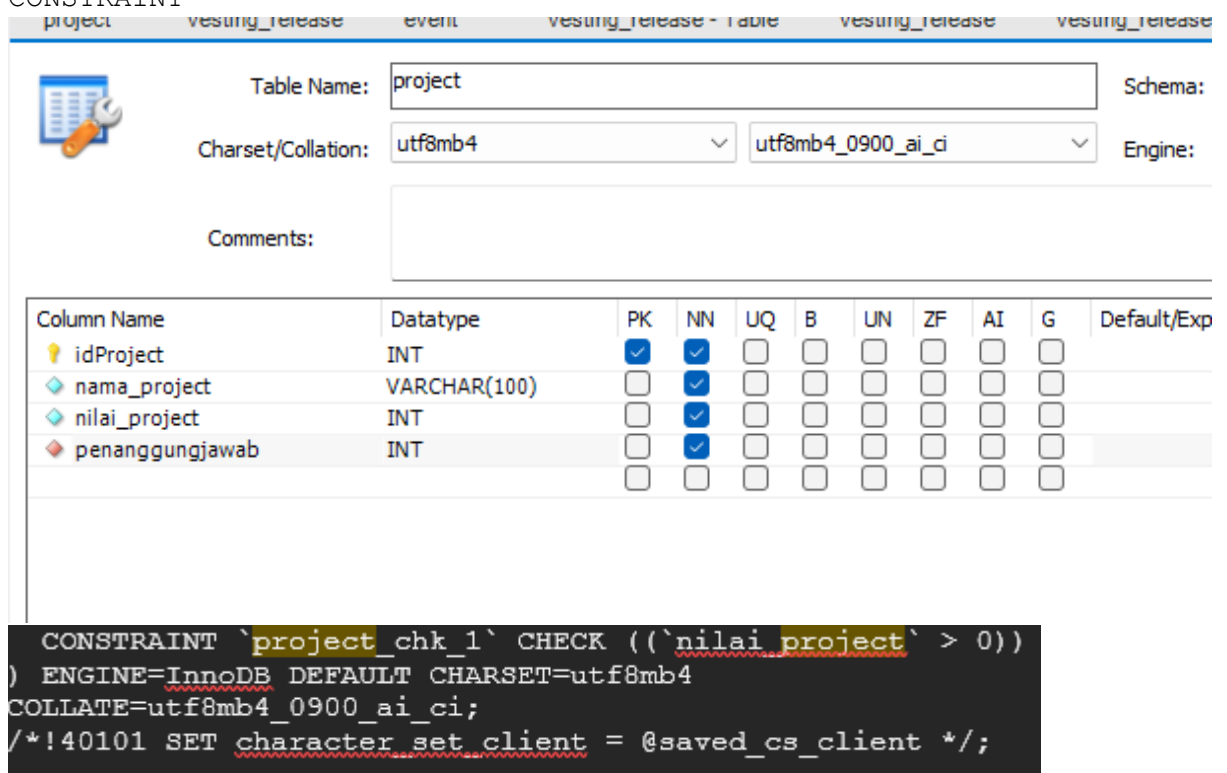
2. Buatlah contoh constraint, trigger, dan event

- CONSTRAINT


```
CONSTRAINT `project_chk_1` CHECK ((`nilai_project` > 0))
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;
```

a. idProject menjadi primary key dari table project
b. Atribut notnull dimiliki oleh semua column karena tidak boleh ada null dalam table ini
c. Table project tidak berisi constraint unique
d. Constraint Check pada table project dimiliki column nilai_project yang berarti nilai project tidak boleh kurang dari 0
e. Tidak ada default pada kolum ini
f. Tidak adad foreign key pada kolum ini

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- TRIGGER

```
CREATE DEFINER=`root`@`localhost` TRIGGER
`update_nilai_project` BEFORE UPDATE ON `project` FOR EACH
ROW BEGIN
    INSERT INTO log_project
    set nilai_lama = old.nilai_project,
    nilai_baru = new.nilai_project,
    waktu = NOW(),
    nama_project = old.nama_project;
END
```

TRIGGER ini akan menjalankan fungsi log yang mana apabila
terjadi pergantian nilai_project pada table project maka
pergantiannya akan direkam dalam table log_project

- Event Scheduler

```
CREATE EVENT vesting
on schedule every 1 year
DO
    update vesting_release
    set belum_cair = belum_cair -
nilai_project*percetage/100,
    sudah_cair = nilai_project*percetage/100
```

Event ini akan otomatis mengupdate kolom belum cair dan sudah
cair sesuai jumlah persentasi vesting yang dilaksanakan selama
setahun