Laporan Implementasi Basis Data I

**Anggota**

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Ihsan Naufal Ardanto 1406576641

Mahdi Firdaus 1406575815

Muhammad Irfan Bisyr 1406578205

**Alamat Repository**

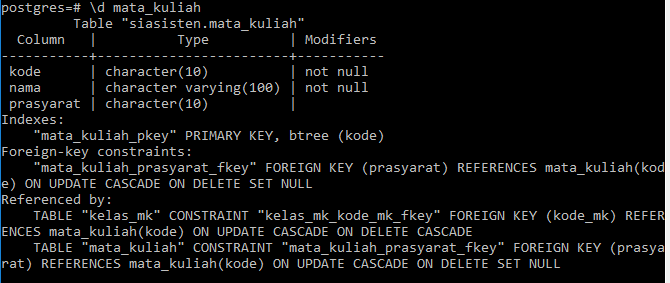
<https://github.com/filzav/TKBasdat>

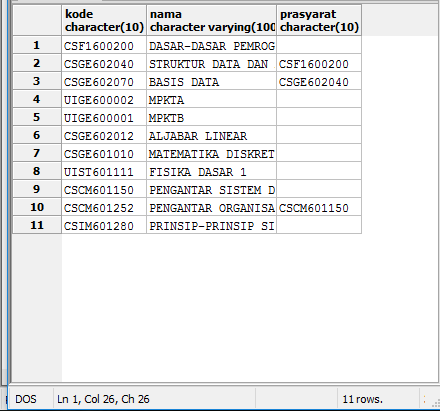
**Perintah DDL Untuk Setiap Table**

Berikut adalah perintah DDL beserta screenshot perintah \d beserta state dari table setelah diisi data asli.

MATA\_KULIAH

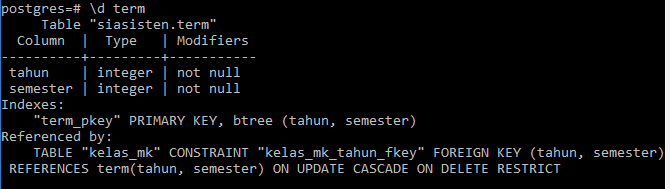
CREATE TABLE MATA\_KULIAH(  
 Kode CHAR(10) PRIMARY KEY,  
 Nama VARCHAR(100) NOT NULL,  
 Prasyarat CHAR(10) REFERENCES MATA\_KULIAH(Kode) ON UPDATE CASCADE ON DELETE SET NULL  
);

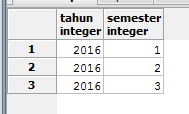




TERM

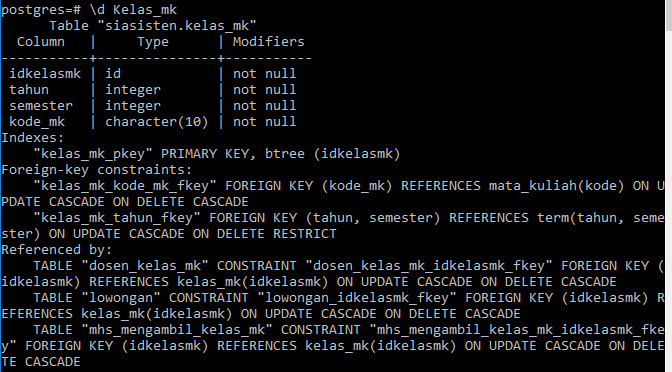
CREATE TABLE TERM(  
 Tahun INTEGER,  
 Semester INTEGER,  
 PRIMARY KEY(Tahun, Semester)  
);

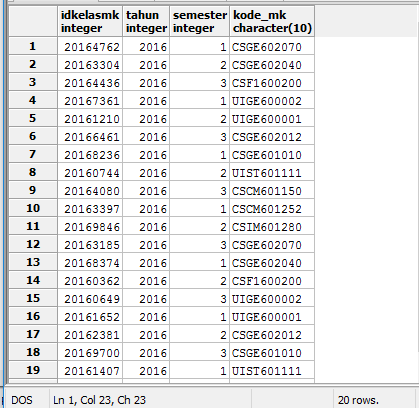




KELAS\_MK

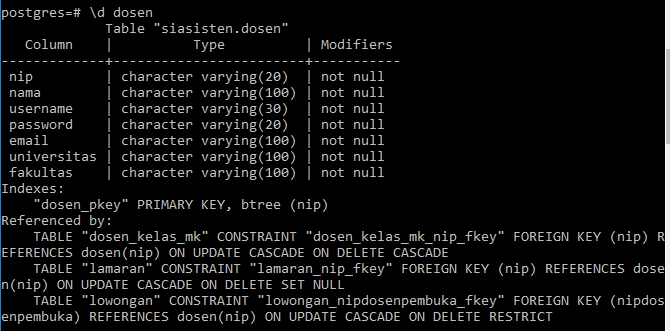
CREATE TABLE KELAS\_MK(  
 IDKelasMK ID PRIMARY KEY,  
 Tahun INTEGER NOT NULL,  
 Semester INTEGER NOT NULL,   
 FOREIGN KEY(Tahun, Semester) REFERENCES TERM(Tahun, Semester) ON UPDATE CASCADE ON DELETE RESTRICT,  
 Kode\_MK CHAR(10) NOT NULL REFERENCES MATA\_KULIAH(Kode) ON UPDATE CASCADE ON DELETE CASCADE  
);

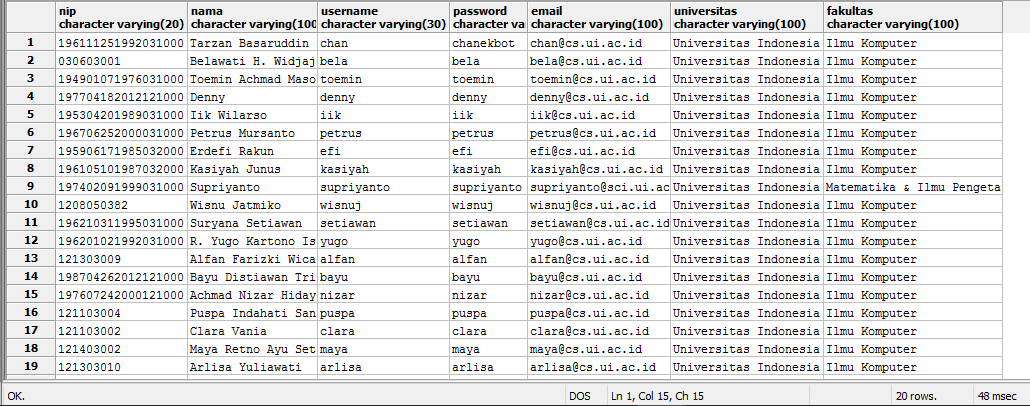




DOSEN

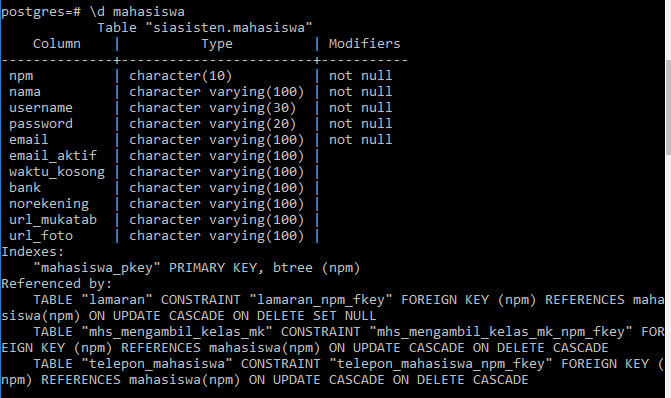
CREATE TABLE DOSEN(  
 NIP VARCHAR(20) PRIMARY KEY,  
 Nama VARCHAR(100) NOT NULL,  
 Username VARCHAR(30) NOT NULL,  
 Password VARCHAR(20) NOT NULL,  
 Email VARCHAR(100) NOT NULL,  
 Universitas VARCHAR(100) NOT NULL,  
 Fakultas VARCHAR(100) NOT NULL  
);

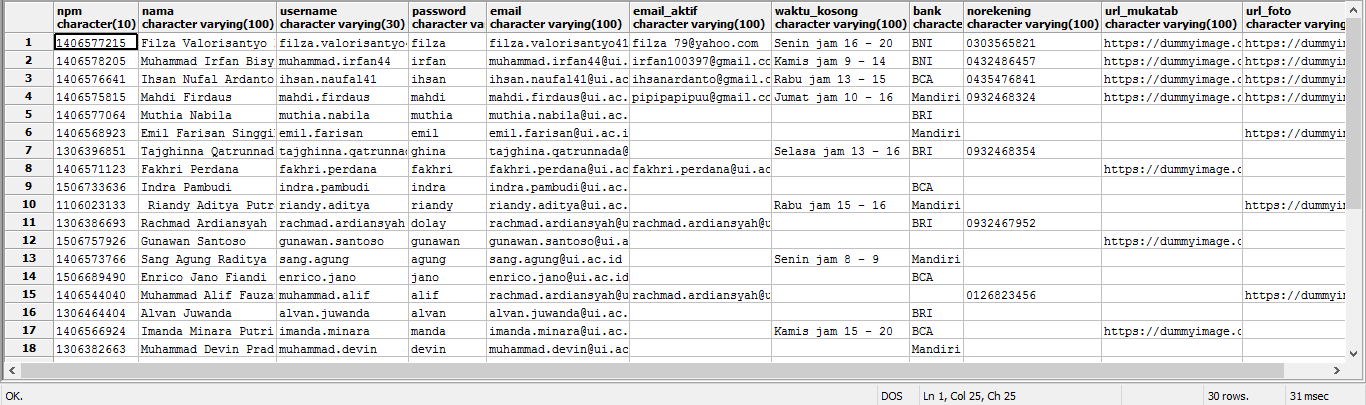




MAHASISWA

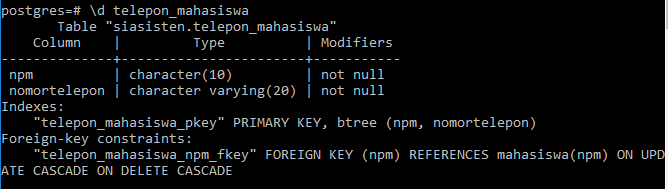
CREATE TABLE MAHASISWA(  
 NPM CHAR(10) PRIMARY KEY,  
 Nama VARCHAR(100) NOT NULL,  
 Username VARCHAR(30) NOT NULL,  
 Password VARCHAR(20) NOT NULL,  
 Email VARCHAR(100) NOT NULL,  
 Email\_aktif VARCHAR(100),  
 Waktu\_kosong VARCHAR(100),  
 Bank VARCHAR(100),  
 Norekening VARCHAR(100),  
 Url\_mukatab VARCHAR(100),  
 Url\_foto VARCHAR(100)  
);

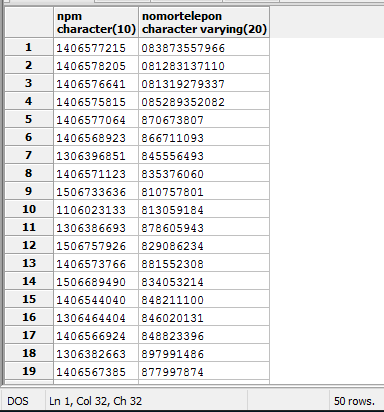




TELEPON MAHASISWA

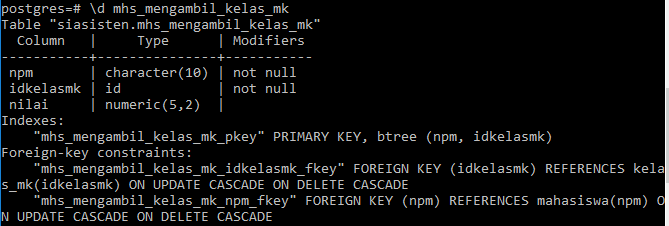
CREATE TABLE TELEPON\_MAHASISWA(  
 NPM CHAR(10) REFERENCES MAHASISWA(NPM) ON UPDATE CASCADE ON DELETE CASCADE,  
 Nomortelepon VARCHAR(20) NOT NULL,  
 PRIMARY KEY (NPM, Nomortelepon)  
);

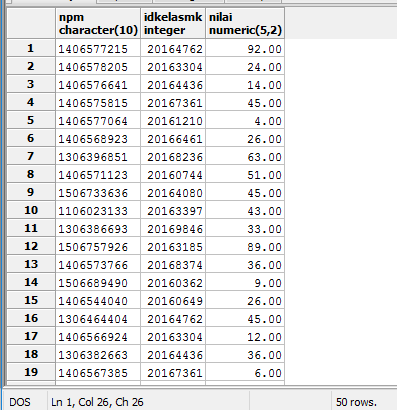




MHS\_MENGAMBIL\_KELAS\_MK

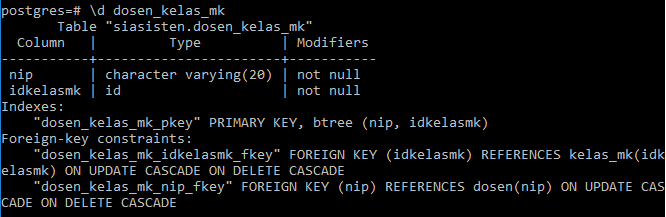
CREATE TABLE MHS\_MENGAMBIL\_KELAS\_MK(  
 NPM CHAR(10) REFERENCES MAHASISWA(NPM) ON UPDATE CASCADE ON DELETE CASCADE,  
 IDKelasMK ID REFERENCES KELAS\_MK(IDKelasMK) ON UPDATE CASCADE ON DELETE CASCADE,  
 Nilai NUMERIC(5,2),  
 PRIMARY KEY(NPM, IDKelasMK)  
);

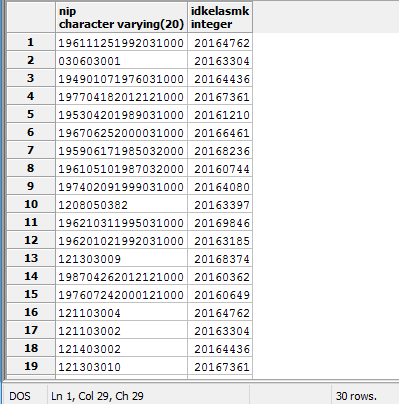




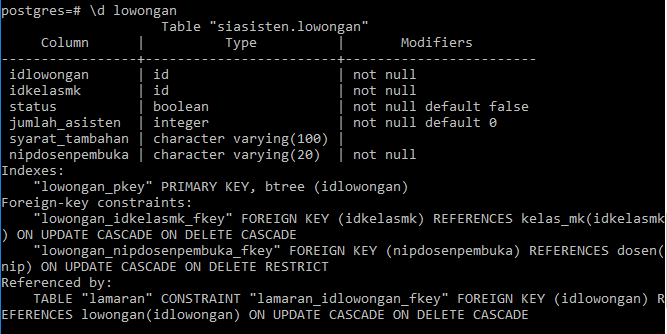
DOSEN\_KELAS\_MK

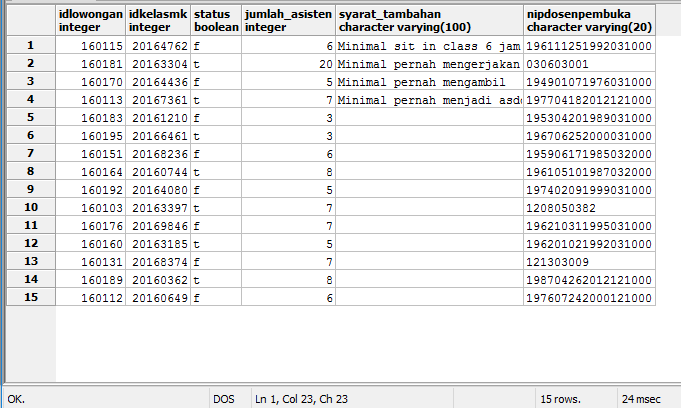
CREATE TABLE DOSEN\_KELAS\_MK(  
 NIP VARCHAR(20) REFERENCES DOSEN(NIP) ON UPDATE CASCADE ON DELETE CASCADE,  
 IDKelasMK ID REFERENCES KELAS\_MK(IDKelasMK) ON UPDATE CASCADE ON DELETE CASCADE,  
 PRIMARY KEY(NIP, IDKelasMK)  
);



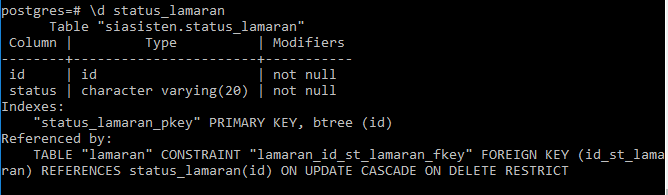
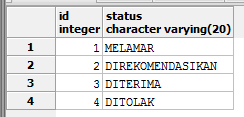


LOWONGAN

CREATE TABLE LOWONGAN(  
 IDLowongan ID PRIMARY KEY,  
 IDKelasMK ID NOT NULL REFERENCES KELAS\_MK ON UPDATE CASCADE ON DELETE CASCADE,  
 Status BOOLEAN NOT NULL DEFAULT False,  
 Jumlah\_asisten INTEGER NOT NULL DEFAULT 0,  
 Syarat\_tambahan VARCHAR(100),  
 NIPDosenPembuka VARCHAR(20) NOT NULL REFERENCES DOSEN(NIP) ON UPDATE CASCADE ON DELETE RESTRICT  
);  


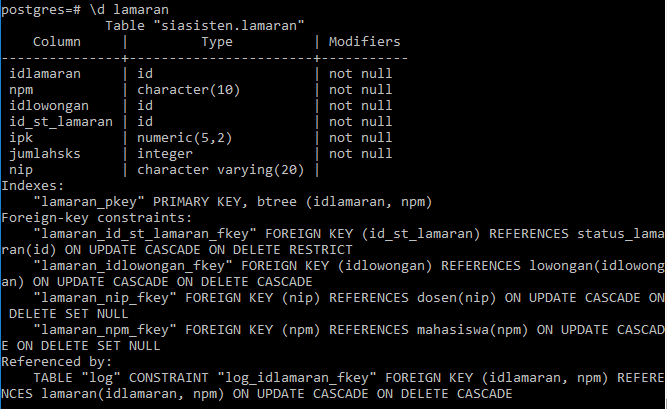


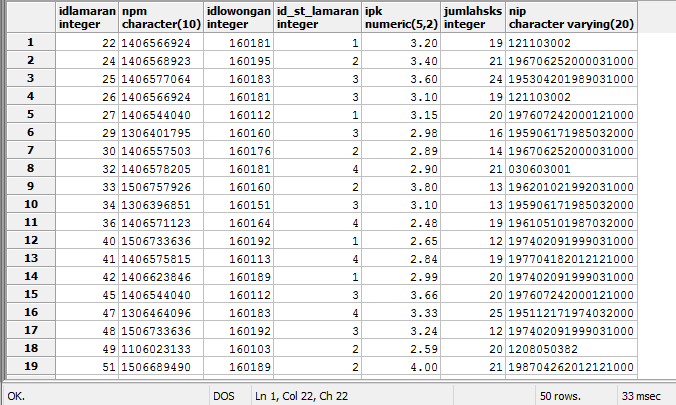
STATUS\_LAMARAN

CREATE TABLE STATUS\_LAMARAN(  
 ID ID PRIMARY KEY,  
 Status VARCHAR(20) NOT NULL  
);  
  


LAMARAN

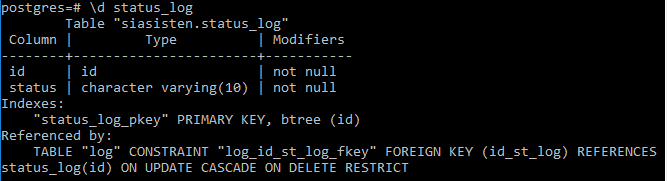
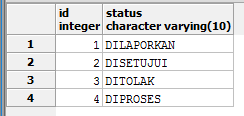
CREATE TABLE LAMARAN(  
 IDLamaran ID,  
 NPM CHAR(10) REFERENCES MAHASISWA(NPM) ON UPDATE CASCADE ON DELETE SET NULL,  
 IDLowongan ID NOT NULL REFERENCES LOWONGAN(IDLowongan) ON UPDATE CASCADE ON DELETE CASCADE,  
 ID\_st\_lamaran ID NOT NULL REFERENCES STATUS\_LAMARAN(ID) ON UPDATE CASCADE ON DELETE RESTRICT,  
 IPK NUMERIC(5,2) NOT NULL,  
 JumlahSKS INTEGER NOT NULL,  
 NIP VARCHAR(20) REFERENCES DOSEN(NIP) ON UPDATE CASCADE ON DELETE SET NULL,  
 PRIMARY KEY(IDLamaran, NPM)  
);



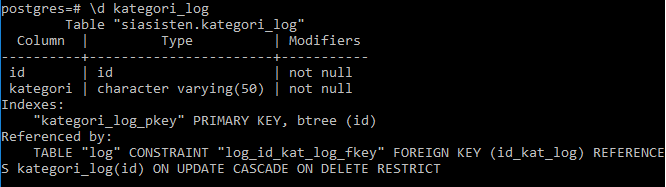


STATUS\_LOG

CREATE TABLE STATUS\_LOG(  
 ID ID PRIMARY KEY,  
 Status VARCHAR(10) NOT NULL  
);

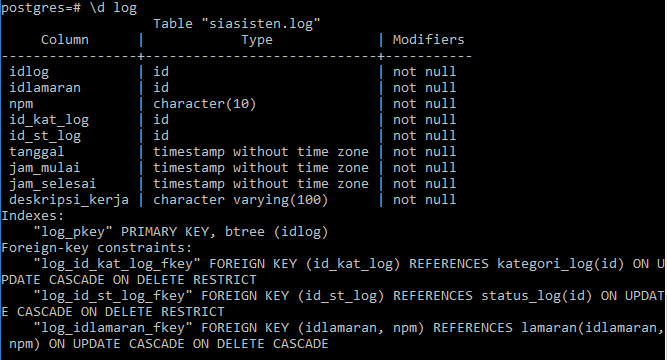
KATEGORI\_LOG

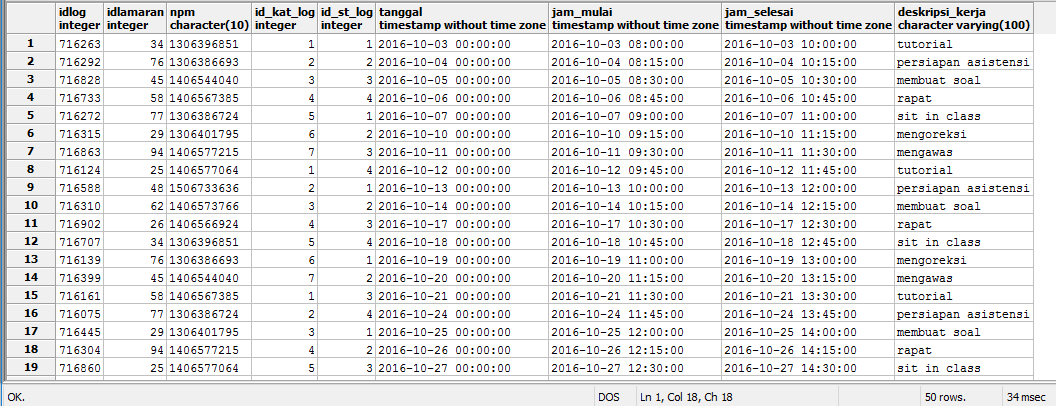
CREATE TABLE KATEGORI\_LOG(  
 ID ID PRIMARY KEY,  
 Kategori VARCHAR(50) NOT NULL  
);  




LOG

CREATE TABLE LOG(  
 IDLog ID PRIMARY KEY,  
 IDLamaran ID NOT NULL,  
 NPM CHAR(10) NOT NULL,  
 FOREIGN KEY(IDLamaran, NPM) REFERENCES LAMARAN(IDLamaran, NPM) ON UPDATE CASCADE ON DELETE CASCADE,  
 ID\_kat\_log ID NOT NULL REFERENCES KATEGORI\_LOG(ID) ON UPDATE CASCADE ON DELETE RESTRICT,  
 ID\_st\_log ID NOT NULL REFERENCES STATUS\_LOG(ID) ON UPDATE CASCADE ON DELETE RESTRICT,  
 Tanggal TIMESTAMP NOT NULL,  
 Jam\_mulai TIMESTAMP NOT NULL,  
 Jam\_selesai TIMESTAMP NOT NULL,  
 Deskripsi\_kerja VARCHAR(100) NOT NULL  
);





**Persentase Pengerjaan**

|  |  |  |  |
| --- | --- | --- | --- |
| NPM | Nama | Deskripsi Tugas | Kontribusi |
| 1406577215 | Filza Valorisantyo Hudiyono | Membuat git, membuat data real | 25% |
| 1406576641 | Ihsan Naufal Ardanto | Membuat laporan | 25% |
| 1406575815 | Mahdi Firdaus | Membuat DDL tabel, melakukan validasi input data, membuat local database | 25% |
| 1406578205 | Muhammad Irfan Bisyr | Membuat data random, membuat aplikasi untuk me-*random* data | 25% |