

## Laporan Implementasi Basis Data I

### Anggota

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1406576641  
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### 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  
);
```

```
postgres=# \d mata_kuliah  
          Table "siasisten.mata_kuliah"  
  Column      |      Type      | Modifiers  
-----+-----+-----  
 kode         | character(10)   | not null  
 nama         | character varying(100) | not null  
 prasyarat    | character(10)   |  
Indexes:  
    "mata_kuliah_pkey" PRIMARY KEY, btree (kode)  
Foreign-key constraints:  
    "mata_kuliah_prasyarat_fkey" FOREIGN KEY (prasyarat) REFERENCES mata_kuliah(kod  
e) ON UPDATE CASCADE ON DELETE SET NULL  
Referenced by:  
    TABLE "kelas_mk" CONSTRAINT "kelas_mk_kode_mk_fkey" FOREIGN KEY (kode_mk) REFER  
ENCES mata_kuliah(kode) ON UPDATE CASCADE ON DELETE CASCADE  
    TABLE "mata_kuliah" CONSTRAINT "mata_kuliah_prasyarat_fkey" FOREIGN KEY (prasya  
rat) REFERENCES mata_kuliah(kode) ON UPDATE CASCADE ON DELETE SET NULL
```

	kode character(10)	nama character varying(100)	prasyarat character(10)
1	CSF1600200	DASAR-DASAR PEMROG	
2	CSGE602040	STRUKTUR DATA DAN	CSF1600200
3	CSGE602070	BASIS DATA	CSGE602040
4	UIGE600002	MPKTA	
5	UIGE600001	MPKTB	
6	CSGE602012	ALJABAR LINEAR	
7	CSGE601010	MATEMATIKA DISKRET	
8	UIST601111	FISIKA DASAR 1	
9	CSCM601150	PENGANTAR SISTEM D	
10	CSCM601252	PENGANTAR ORGANISA	CSCM601150
11	CSIM601280	PRINSIP-PRINSIP SI	

DOS Ln 1, Col 26, Ch 26 11 rows.

## TERM

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

```
postgres=# \d term
Table "siasisten.term"
Column | Type   | Modifiers
-----+-----+-----
tahun  | integer | not null
semester | integer | not null
Indexes:
    "term_pkey" PRIMARY KEY, btree (tahun, semester)
Referenced by:
    TABLE "kelas_mk" CONSTRAINT "kelas_mk_tahun_fkey" FOREIGN KEY (tahun, semester)
    REFERENCES term(tahun, semester) ON UPDATE CASCADE ON DELETE RESTRICT
```

	tahun integer	semester integer
1	2016	1
2	2016	2
3	2016	3

## 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
);
```

```
postgres=# \d Kelas_mk
Table "siasisten.kelas_mk"
  Column      |      Type      | Modifiers
-----+-----+-----
idkelasmk     | id              | not null
tahun         | integer         | not null
semester      | integer         | not null
kode_mk       | character(10)   | not null
Indexes:
    "kelas_mk_pkey" PRIMARY KEY, btree (idkelasmk)
Foreign-key constraints:
    "kelas_mk_kode_mk_fkey" FOREIGN KEY (kode_mk) REFERENCES mata_kuliah(kode) ON U
PDATE CASCADE ON DELETE CASCADE
    "kelas_mk_tahun_fkey" FOREIGN KEY (tahun, semester) REFERENCES term(tahun, seme
ster) ON UPDATE CASCADE ON DELETE RESTRICT
Referenced by:
    TABLE "dosen_kelas_mk" CONSTRAINT "dosen_kelas_mk_idkelasmk_fkey" FOREIGN KEY (
idkelasmk) REFERENCES kelas_mk(idkelasmk) ON UPDATE CASCADE ON DELETE CASCADE
    TABLE "lowongan" CONSTRAINT "lowongan_idkelasmk_fkey" FOREIGN KEY (idkelasmk) R
EFERENCES kelas_mk(idkelasmk) ON UPDATE CASCADE ON DELETE CASCADE
    TABLE "mhs_mengambil_kelas_mk" CONSTRAINT "mhs_mengambil_kelas_mk_idkelasmk_fke
y" FOREIGN KEY (idkelasmk) REFERENCES kelas_mk(idkelasmk) ON UPDATE CASCADE ON DELE
TE CASCADE
```

	idkelas integer	mk integer	tahun integer	semester integer	kode_mk character(10)
1	20164762	2016		1	CSGE602070
2	20163304	2016		2	CSGE602040
3	20164436	2016		3	CSF1600200
4	20167361	2016		1	UIGE600002
5	20161210	2016		2	UIGE600001
6	20166461	2016		3	CSGE602012
7	20168236	2016		1	CSGE601010
8	20160744	2016		2	UIST601111
9	20164080	2016		3	CSCM601150
10	20163397	2016		1	CSCM601252
11	20169846	2016		2	CSIM601280
12	20163185	2016		3	CSGE602070
13	20168374	2016		1	CSGE602040
14	20160362	2016		2	CSF1600200
15	20160649	2016		3	UIGE600002
16	20161652	2016		1	UIGE600001
17	20162381	2016		2	CSGE602012
18	20169700	2016		3	CSGE601010
19	20161407	2016		1	UIST601111

DOS
Ln 1, Col 23, Ch 23
20 rows.

## 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
);

```

```

postgres=# \d dosen
Table "siasisten.dosen"
  Column      |      Type      | Modifiers
-----+-----+-----
nip           | character varying(20) | not null
nama          | character varying(100) | not null
username      | character varying(30) | not null
password      | character varying(20) | not null
email         | character varying(100) | not null
universitas   | character varying(100) | not null
fakultas      | character varying(100) | not null
Indexes:
    "dosen_pkey" PRIMARY KEY, btree (nip)
Referenced by:
    TABLE "dosen_kelas_mk" CONSTRAINT "dosen_kelas_mk_nip_fkey" FOREIGN KEY (nip) REFERENCES dosen(nip) ON UPDATE CASCADE ON DELETE CASCADE
    TABLE "lamaran" CONSTRAINT "lamaran_nip_fkey" FOREIGN KEY (nip) REFERENCES dosen(nip) ON UPDATE CASCADE ON DELETE SET NULL
    TABLE "lowongan" CONSTRAINT "lowongan_nipdosenpembuka_fkey" FOREIGN KEY (nipdosenpembuka) REFERENCES dosen(nip) ON UPDATE CASCADE ON DELETE RESTRICT

```

	nip character varying(20)	nama character varying(100)	username character varying(30)	password character varying(20)	email character varying(100)	universitas character varying(100)	fakultas character varying(100)
1	196111251992031000	Tarzan Basaruddin	chan	chanekbot	chan@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
2	030603001	Belawati H. Widjaj	bela	bela	bela@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
3	194901071976031000	Toemin Achmad Maso	toemin	toemin	toemin@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
4	197704182012121000	Denny	denny	denny	denny@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
5	195304201989031000	Iik Wilarso	iik	iik	iik@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
6	196706252000031000	Petrus Mursanto	petrus	petrus	petrus@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
7	195906171985032000	Erdefi Rakun	efi	efi	efi@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
8	196105101987032000	Kasiyah Junus	kasiyah	kasiyah	kasiyah@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
9	197402091999031000	Supriyanto	supriyanto	supriyanto	supriyanto@sci.ui.ac	Universitas Indonesia	Matematika & Ilmu Pengeta
10	1208050382	Wisnu Jatmiko	wisnuj	wisnuj	wisnuj@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
11	196210311995031000	Suryana Setiawan	setiawan	setiawan	setiawan@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
12	196201021992031000	R. Yugo Kartono Is	yugo	yugo	yugo@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
13	121303009	Alfan Farizki Wica	alfan	alfan	alfan@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
14	198704262012121000	Bayu Distiawan Tri	bayu	bayu	bayu@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
15	197607242000121000	Achmad Nizar Hiday	nizar	nizar	nizar@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
16	121103004	Puspa Indahati San	puspa	puspa	puspa@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
17	121103002	Clara Vania	clara	clara	clara@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
18	121403002	Maya Retno Ayu Set	maya	maya	maya@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer
19	121303010	Arlisa Yuliawati	arlisa	arlisa	arlisa@cs.ui.ac.id	Universitas Indonesia	Ilmu Komputer

OK.

DOS Ln 1, Col 15, Ch 15

20 rows.

48 msec

## 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)

```

);

```
postgres=# \d mahasiswa
Table "siasisten.mahasiswa"
  Column      |      Type      | Modifiers
-----+-----+-----
npm           | character(10)   | not null
nama          | character varying(100) | not null
username      | character varying(30) | not null
password      | character varying(20) | not null
email         | character varying(100) | not null
email_aktif   | character varying(100) |
waktu_kosong  | character varying(100) |
bank          | character varying(100) |
norekening    | character varying(100) |
url_mukatab   | character varying(100) |
url_foto      | character varying(100) |

Indexes:
    "mahasiswa_pkey" PRIMARY KEY, btree (npm)
Referenced by:
    TABLE "lamaran" CONSTRAINT "lamaran_npm_fkey" FOREIGN KEY (npm) REFERENCES mahasiswa(npm) ON UPDATE CASCADE ON DELETE SET NULL
    TABLE "mhs_mengambil_kelas_mk" CONSTRAINT "mhs_mengambil_kelas_mk_npm_fkey" FOREIGN KEY (npm) REFERENCES mahasiswa(npm) ON UPDATE CASCADE ON DELETE CASCADE
    TABLE "telepon_mahasiswa" CONSTRAINT "telepon_mahasiswa_npm_fkey" FOREIGN KEY (npm) REFERENCES mahasiswa(npm) ON UPDATE CASCADE ON DELETE CASCADE
```

	npm character(10)	nama character varying(100)	username character varying(30)	password character varying(20)	email character varying(100)	email_aktif character varying(100)	waktu_kosong character varying(100)	bank character varying(100)	norekening character varying(100)	url_mukatab character varying(100)	url_foto character varying(100)
1	1406577215	Filza Valorisantyo	filza.valorisantyo	filza	filza.valorisantyo41	filza.79@yahoo.com	Senin jam 16 - 20	BNI	0303565821	https://dummyimage.c	https://dummyi
2	1406578205	Muhammad Irfan Bis	muhammad.irfan44	irfan	muhammad.irfan44@ui	irfan100397@gmail.c	Kamis jam 9 - 14	BNI	0432486457	https://dummyimage.c	https://dummyi
3	1406576641	Ihsan Nufel Ardanto	ihsan.naufal41	ihsan	ihsan.naufal41@ui.ac	ihsanardanto@gmail.c	Rabu jam 13 - 15	BCA	0435476841	https://dummyimage.c	https://dummyi
4	1406575815	Mahdi Firdaus	mahdi.firdaus	mahdi	mahdi.firdaus@ui.ac	pipipapipuu@gmail.c	Jumat jam 10 - 16	Mandiri	0932468324	https://dummyimage.c	https://dummyi
5	1406577064	Muthia Nabila	muthia.nabila	muthia	muthia.nabila@ui.ac			BRI			
6	1406568923	Emil Farisan Singgi	emil.farisan	emil	emil.farisan@ui.ac			Mandiri			https://dummyi
7	1306396851	Tejghinna Qetrunnad	tejghinna.qetrunna	ghina	tejghina.qetrunnada		Selasa jam 13 - 16	BRI	0932468354		
8	1406571123	Fakhri Perdana	fakhri.perdana	fakhri	fakhri.perdana@ui.ac					https://dummyimage.c	
9	1506733636	Indra Pembudi	indra.pembudi	indra	indra.pembudi@ui.ac			BCA			
10	1106023133	Riandy Aditya Putr	riandy.aditya	riandy	riandy.aditya@ui.ac		Rabu jam 15 - 16	Mandiri			https://dummyi
11	1306396693	Rachmad Ardiansyah	rachmad.ardiansyah	dolay	rachmad.ardiansyah@	rachmad.ardiansyah@		BRI	0932467952		
12	1506757926	Gunawan Santoso	gunawan.santoso	gunawan	gunawan.santoso@ui.a					https://dummyimage.c	
13	1406573766	Sang Agung Raditya	sang.agung	agung	sang.agung@ui.ac.id		Senin jam 8 - 9	Mandiri			
14	1506699490	Enrico Jano Fiandi	enrico.jano	jano	enrico.jano@ui.ac.id			BCA			
15	1406544040	Muhammad Alif Fauza	muhammad.alif	alif	rachmad.ardiansyah@	rachmad.ardiansyah@			0126823456		https://dummyi
16	1306464404	Alvan Juwanda	alvan.juwanda	alvan	alvan.juwanda@ui.ac			BRI			
17	1406566924	Imanda Minara Putri	imanda.minara	manda	imanda.minara@ui.ac		Kamis jam 15 - 20	BCA		https://dummyimage.c	
18	1306382663	Muhammad Devin Prad	muhammad.devin	devin	muhammad.devin@ui.ac			Mandiri			

OK. DOS Ln 1, Col 25, Ch 25 30 rows. 31 msec

## 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)
);
```

```

postgres=# \d telepon_mahasiswa
Table "siasisten.telepon_mahasiswa"
  Column      |      Type      | Modifiers
-----+-----+-----
npm           | character(10)   | not null
nomortelepon  | character varying(20) | not null
Indexes:
    "telepon_mahasiswa_pkey" PRIMARY KEY, btree (npm, nomortelepon)
Foreign-key constraints:
    "telepon_mahasiswa_npm_fkey" FOREIGN KEY (npm) REFERENCES mahasiswa(npm) ON UPDATE CASCADE ON DELETE CASCADE

```

	<b>npm character(10)</b>	<b>nomortelepon character varying(20)</b>	
<b>1</b>	1406577215	083873557966	
<b>2</b>	1406578205	081283137110	
<b>3</b>	1406576641	081319279337	
<b>4</b>	1406575815	085289352082	
<b>5</b>	1406577064	870673807	
<b>6</b>	1406568923	866711093	
<b>7</b>	1306396851	845556493	
<b>8</b>	1406571123	835376060	
<b>9</b>	1506733636	810757801	
<b>10</b>	1106023133	813059184	
<b>11</b>	1306386693	878605943	
<b>12</b>	1506757926	829086234	
<b>13</b>	1406573766	881552308	
<b>14</b>	1506689490	834053214	
<b>15</b>	1406544040	848211100	
<b>16</b>	1306464404	846020131	
<b>17</b>	1406566924	848823396	
<b>18</b>	1306382663	897991486	
<b>19</b>	1406567385	877997874	
DOS	Ln 1, Col 32, Ch 32		50 rows.

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)
);
```

```
postgres=# \d mhs_mengambil_kelas_mk
Table "siasisten.mhs_mengambil_kelas_mk"
  Column      |      Type      | Modifiers
-----+-----+-----
npm           | character(10)   | not null
idkelasmk     | id              | not null
nilai         | numeric(5,2)    |
Indexes:
    "mhs_mengambil_kelas_mk_pkey" PRIMARY KEY, btree (npm, idkelasmk)
Foreign-key constraints:
    "mhs_mengambil_kelas_mk_idkelasmk_fkey" FOREIGN KEY (idkelasmk) REFERENCES kelas_mk(idkelasmk) ON UPDATE CASCADE ON DELETE CASCADE
    "mhs_mengambil_kelas_mk_npm_fkey" FOREIGN KEY (npm) REFERENCES mahasiswa(npm) ON UPDATE CASCADE ON DELETE CASCADE
```

	<b>npm character(10)</b>	<b>idkelasmk integer</b>	<b>nilai numeric(5,2)</b>	
1	1406577215	20164762	92.00	
2	1406578205	20163304	24.00	
3	1406576641	20164436	14.00	
4	1406575815	20167361	45.00	
5	1406577064	20161210	4.00	
6	1406568923	20166461	26.00	
7	1306396851	20168236	63.00	
8	1406571123	20160744	51.00	
9	1506733636	20164080	45.00	
10	1106023133	20163397	43.00	
11	1306386693	20169846	33.00	
12	1506757926	20163185	89.00	
13	1406573766	20168374	36.00	
14	1506689490	20160362	9.00	
15	1406544040	20160649	26.00	
16	1306464404	20164762	45.00	
17	1406566924	20163304	12.00	
18	1306382663	20164436	36.00	
19	1406567385	20167361	6.00	
DOS	Ln 1, Col 26, Ch 26		50 rows.	

## 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)
);

```

```

postgres=# \d dosen_kelas_mk
          Table "siasisten.dosen_kelas_mk"
   Column   |      Type      | Modifiers
-----+-----+-----
  nip       | character varying(20) | not null
 idkelasmk  | id              | not null
Indexes:
    "dosen_kelas_mk_pkey" PRIMARY KEY, btree (nip, idkelasmk)
Foreign-key constraints:
    "dosen_kelas_mk_idkelasmk_fkey" FOREIGN KEY (idkelasmk) REFERENCES kelas_mk(idkelasmk) ON UPDATE CASCADE ON DELETE CASCADE
    "dosen_kelas_mk_nip_fkey" FOREIGN KEY (nip) REFERENCES dosen(nip) ON UPDATE CASCADE ON DELETE CASCADE

```

	nip character varying(20)	idkelasmk integer	
1	196111251992031000	20164762	
2	030603001	20163304	
3	194901071976031000	20164436	
4	197704182012121000	20167361	
5	195304201989031000	20161210	
6	196706252000031000	20166461	
7	195906171985032000	20168236	
8	196105101987032000	20160744	
9	197402091999031000	20164080	
10	1208050382	20163397	
11	196210311995031000	20169846	
12	196201021992031000	20163185	
13	121303009	20168374	
14	198704262012121000	20160362	
15	197607242000121000	20160649	
16	121103004	20164762	
17	121103002	20163304	
18	121403002	20164436	
19	121303010	20167361	
DOS	Ln 1, Col 29, Ch 29		30 rows.

## 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
);

```

```

postgres=# \d lowongan
                    Table "siasisten.lowongan"
   Column   |      Type      | Modifiers
-----+-----+-----
 idlowongan |      id         | not null
 idkelasmk  |      id         | not null
 status     |      boolean    | not null default false
 jumlah_asisten |      integer    | not null default 0
 syarat_tambahan | character varying(100) |
 nipdosenpembuka | character varying(20) | not null
Indexes:
    "lowongan_pkey" PRIMARY KEY, btree (idlowongan)
Foreign-key constraints:
    "lowongan_idkelasmk_fkey" FOREIGN KEY (idkelasmk) REFERENCES kelas_mk(idkelasmk)
    ) ON UPDATE CASCADE ON DELETE CASCADE
    "lowongan_nipdosenpembuka_fkey" FOREIGN KEY (nipdosenpembuka) REFERENCES dosen(
nip) ON UPDATE CASCADE ON DELETE RESTRICT
Referenced by:
    TABLE "lamaran" CONSTRAINT "lamaran_idlowongan_fkey" FOREIGN KEY (idlowongan) R
EFERENCES lowongan(idlowongan) ON UPDATE CASCADE ON DELETE CASCADE

```

	idlowongan integer	idkelasmk integer	status boolean	jumlah_asisten integer	syarat_tambahan character varying(100)	nipdosenpembuka character varying(20)	
1	160115	20164762	f	6	Minimal sit in class 6 jam	196111251992031000	
2	160181	20163304	t	20	Minimal pernah mengerjakan	030603001	
3	160170	20164436	f	5	Minimal pernah mengambil	194901071976031000	
4	160113	20167361	t	7	Minimal pernah menjadi asd	197704182012121000	
5	160183	20161210	f	3		195304201989031000	
6	160195	20166461	t	3		196706252000031000	
7	160151	20168236	f	6		195906171985032000	
8	160164	20160744	t	8		196105101987032000	
9	160192	20164080	f	5		197402091999031000	
10	160103	20163397	t	7		1208050382	
11	160176	20169846	f	7		196210311995031000	
12	160160	20163185	t	5		196201021992031000	
13	160131	20168374	f	7		121303009	
14	160189	20160362	t	8		198704262012121000	
15	160112	20160649	f	6		197607242000121000	
OK.	DOS		Ln 1, Col 23, Ch 23			15 rows.	24 msec

STATUS\_LAMARAN

```
CREATE TABLE STATUS_LAMARAN(
    ID ID PRIMARY KEY,
    Status VARCHAR(20) NOT NULL
);
```

```
postgres=# \d status_lamaran
Table "siasisten.status_lamaran"
Column |          Type          | Modifiers
-----+-----+-----
id      | id                      | not null
status  | character varying(20)   | not null
Indexes:
    "status_lamaran_pkey" PRIMARY KEY, btree (id)
Referenced by:
    TABLE "lamaran" CONSTRAINT "lamaran_id_st_lamaran_fkey" FOREIGN KEY (id_st_lamaran) REFERENCES status_lamaran(id) ON UPDATE CASCADE ON DELETE RESTRICT
```

	id integer	status character varying(20)
1	1	MELAMAR
2	2	DIREKOMENDASIKAN
3	3	DITERIMA
4	4	DITOLAK

## 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)
);
```

```

postgres=# \d lamaran
          Table "siasisten.lamaran"
   Column   |      Type      | Modifiers
-----+-----+-----
 idlamaran  | id              | not null
 npm        | character(10)   | not null
 idlowongan | id              | not null
 id_st_lamaran | id            | not null
 ipk        | numeric(5,2)    | not null
 jumlahsk  | integer         | not null
 nip        | character varying(20) |
Indexes:
    "lamaran_pkey" PRIMARY KEY, btree (idlamaran, npm)
Foreign-key constraints:
    "lamaran_id_st_lamaran_fkey" FOREIGN KEY (id_st_lamaran) REFERENCES status_lamaran(id) ON UPDATE CASCADE ON DELETE RESTRICT
    "lamaran_idlowongan_fkey" FOREIGN KEY (idlowongan) REFERENCES lowongan(idlowongan) ON UPDATE CASCADE ON DELETE CASCADE
    "lamaran_nip_fkey" FOREIGN KEY (nip) REFERENCES dosen(nip) ON UPDATE CASCADE ON DELETE SET NULL
    "lamaran_npm_fkey" FOREIGN KEY (npm) REFERENCES mahasiswa(npm) ON UPDATE CASCADE ON DELETE SET NULL
Referenced by:
    TABLE "log" CONSTRAINT "log_idlamaran_fkey" FOREIGN KEY (idlamaran, npm) REFERENCES lamaran(idlamaran, npm) ON UPDATE CASCADE ON DELETE CASCADE

```

	idlamaran integer	npm character(10)	idlowongan integer	id_st_lamaran integer	ipk numeric(5,2)	jumlahsk integer	nip character varying(20)	
1	22	1406566924	160181	1	3.20	19	121103002	
2	24	1406568923	160195	2	3.40	21	196706252000031000	
3	25	1406577064	160183	3	3.60	24	195304201989031000	
4	26	1406566924	160181	3	3.10	19	121103002	
5	27	1406544040	160112	1	3.15	20	197607242000121000	
6	29	1306401795	160160	3	2.98	16	195906171985032000	
7	30	1406557503	160176	2	2.89	14	196706252000031000	
8	32	1406578205	160181	4	2.90	21	030603001	
9	33	1506757926	160160	2	3.80	13	196201021992031000	
10	34	1306396851	160151	3	3.10	13	195906171985032000	
11	36	1406571123	160164	4	2.48	19	196105101987032000	
12	40	1506733636	160192	1	2.65	12	197402091999031000	
13	41	1406575815	160113	4	2.84	19	197704182012121000	
14	42	1406623846	160189	1	2.99	20	197402091999031000	
15	45	1406544040	160112	3	3.66	20	197607242000121000	
16	47	1306464096	160183	4	3.33	25	195112171974032000	
17	48	1506733636	160192	3	3.24	12	197402091999031000	
18	49	1106023133	160103	2	2.59	20	1208050382	
19	51	1506689490	160189	2	4.00	21	198704262012121000	
OK.								
DOS			Ln 1, Col 22, Ch 22			50 rows.		33 msec

## STATUS\_LOG

```
CREATE TABLE STATUS_LOG (
```

```

        ID ID PRIMARY KEY,
        Status VARCHAR(10) NOT NULL
    );

```

```

postgres=# \d status_log
          Table "siasisten.status_log"
   Column |          Type          | Modifiers
-----+-----+-----
    id    | integer                | not null
   status | character varying(10) | not null
Indexes:
    "status_log_pkey" PRIMARY KEY, btree (id)
Referenced by:
    TABLE "log" CONSTRAINT "log_id_st_log_fkey" FOREIGN KEY (id_st_log) REFERENCES status_log(id) ON UPDATE CASCADE ON DELETE RESTRICT

```

	id integer	status character varying(10)
1	1	DILAPORKAN
2	2	DISETUJUI
3	3	DITOLAK
4	4	DIPROSES

## KATEGORI\_LOG

```

CREATE TABLE KATEGORI_LOG(
    ID ID PRIMARY KEY,
    Kategori VARCHAR(50) NOT NULL
);

```

```

postgres=# \d kategori_log
          Table "siasisten.kategori_log"
   Column |          Type          | Modifiers
-----+-----+-----
    id    | integer                | not null
   kategori | character varying(50) | not null
Indexes:
    "kategori_log_pkey" PRIMARY KEY, btree (id)
Referenced by:
    TABLE "log" CONSTRAINT "log_id_kat_log_fkey" FOREIGN KEY (id_kat_log) REFERENCES kategori_log(id) ON UPDATE CASCADE ON DELETE RESTRICT

```

	id integer	kategori character varying(50)
1	1	ASISTENSI/TUTORIAL
2	2	PERSIAPAN ASISTENSI
3	3	MEMBUAT SOAL/TUGAS
4	4	RAPAT
5	5	SIT IN KELAS
6	6	MENGOREKSI
7	7	MENGAWAS

## 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  
);
```

```
postgres=# \d log
```

Column	Type	Modifiers
idlog	id	not null
idlamaran	id	not null
npm	character(10)	not null
id_kat_log	id	not null
id_st_log	id	not null
tanggal	timestamp without time zone	not null
jam_mulai	timestamp without time zone	not null
jam_selesai	timestamp without time zone	not null
deskripsi_kerja	character varying(100)	not null

```
Indexes:  
    "log_pkey" PRIMARY KEY, btree (idlog)  
Foreign-key constraints:  
    "log_id_kat_log_fkey" FOREIGN KEY (id_kat_log) REFERENCES kategori_log(id) ON U  
PDATE CASCADE ON DELETE RESTRICT  
    "log_id_st_log_fkey" FOREIGN KEY (id_st_log) REFERENCES status_log(id) ON UPDAT  
E CASCADE ON DELETE RESTRICT  
    "log_idlamaran_fkey" FOREIGN KEY (idlamaran, npm) REFERENCES lamaran(idlamaran,  
npm) ON UPDATE CASCADE ON DELETE CASCADE
```

	idlog integer	idlamaran integer	npm character(10)	id_kat_log integer	id_st_log integer	tanggal timestamp without time zone	jam_mulai timestamp without time zone	jam_selesai timestamp without time zone	deskripsi_kerja character varying(100)
1	716263	34	1306396851	1	1	2016-10-03 00:00:00	2016-10-03 08:00:00	2016-10-03 10:00:00	tutorial
2	716292	76	1306386693	2	2	2016-10-04 00:00:00	2016-10-04 08:15:00	2016-10-04 10:15:00	persiapan asistensi
3	716828	45	1406544040	3	3	2016-10-05 00:00:00	2016-10-05 08:30:00	2016-10-05 10:30:00	membuat soal
4	716733	58	1406567385	4	4	2016-10-06 00:00:00	2016-10-06 08:45:00	2016-10-06 10:45:00	rapat
5	716272	77	1306386724	5	1	2016-10-07 00:00:00	2016-10-07 09:00:00	2016-10-07 11:00:00	sit in class
6	716315	29	1306401795	6	2	2016-10-10 00:00:00	2016-10-10 09:15:00	2016-10-10 11:15:00	mengoreksi
7	716863	94	1406577215	7	3	2016-10-11 00:00:00	2016-10-11 09:30:00	2016-10-11 11:30:00	mengawas
8	716124	25	1406577064	1	4	2016-10-12 00:00:00	2016-10-12 09:45:00	2016-10-12 11:45:00	tutorial
9	716588	48	1506733636	2	1	2016-10-13 00:00:00	2016-10-13 10:00:00	2016-10-13 12:00:00	persiapan asistensi
10	716310	62	1406573766	3	2	2016-10-14 00:00:00	2016-10-14 10:15:00	2016-10-14 12:15:00	membuat soal
11	716902	26	1406566924	4	3	2016-10-17 00:00:00	2016-10-17 10:30:00	2016-10-17 12:30:00	rapat
12	716707	34	1306396851	5	4	2016-10-18 00:00:00	2016-10-18 10:45:00	2016-10-18 12:45:00	sit in class
13	716139	76	1306386693	6	1	2016-10-19 00:00:00	2016-10-19 11:00:00	2016-10-19 13:00:00	mengoreksi
14	716399	45	1406544040	7	2	2016-10-20 00:00:00	2016-10-20 11:15:00	2016-10-20 13:15:00	mengawas
15	716161	58	1406567385	1	3	2016-10-21 00:00:00	2016-10-21 11:30:00	2016-10-21 13:30:00	tutorial
16	716075	77	1306386724	2	4	2016-10-24 00:00:00	2016-10-24 11:45:00	2016-10-24 13:45:00	persiapan asistensi
17	716445	29	1306401795	3	1	2016-10-25 00:00:00	2016-10-25 12:00:00	2016-10-25 14:00:00	membuat soal
18	716304	94	1406577215	4	2	2016-10-26 00:00:00	2016-10-26 12:15:00	2016-10-26 14:15:00	rapat
19	716860	25	1406577064	5	3	2016-10-27 00:00:00	2016-10-27 12:30:00	2016-10-27 14:30:00	sit in class
OK.							DOS Ln 1, Col 18, Ch 18	50 rows.	34 msec

## 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- <i>random</i> data	25%