

Laporan Tugas Besar
Merancang DataBase Menggunakan Bahasa Pemrograman SQL



Disusun Oleh :

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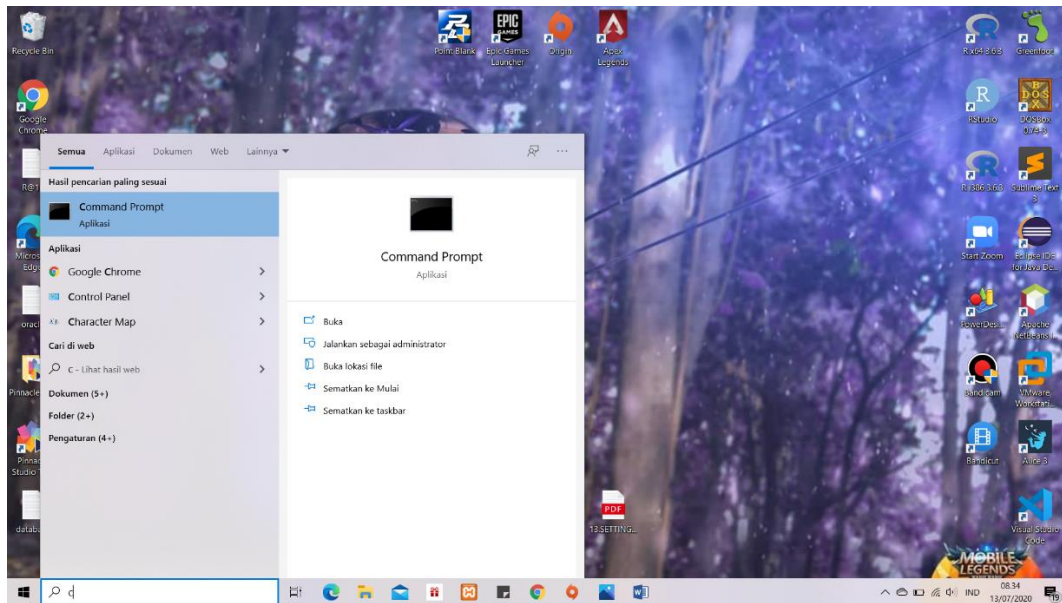
Dosen Pengampu :

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D4 TEKNIK INFORMATIKA
POLITEKNIK POS INDONESIA

2019-2020

Langkah pertama sebelum membuat database, aktifkan xamppnya di bagian Apache dan MySQLnya. Kemudian buka CMDnya klik CMD pada windows lalu buka CMDnya.



Langkah selanjutnya ketik di cmd script yang dibawah ini

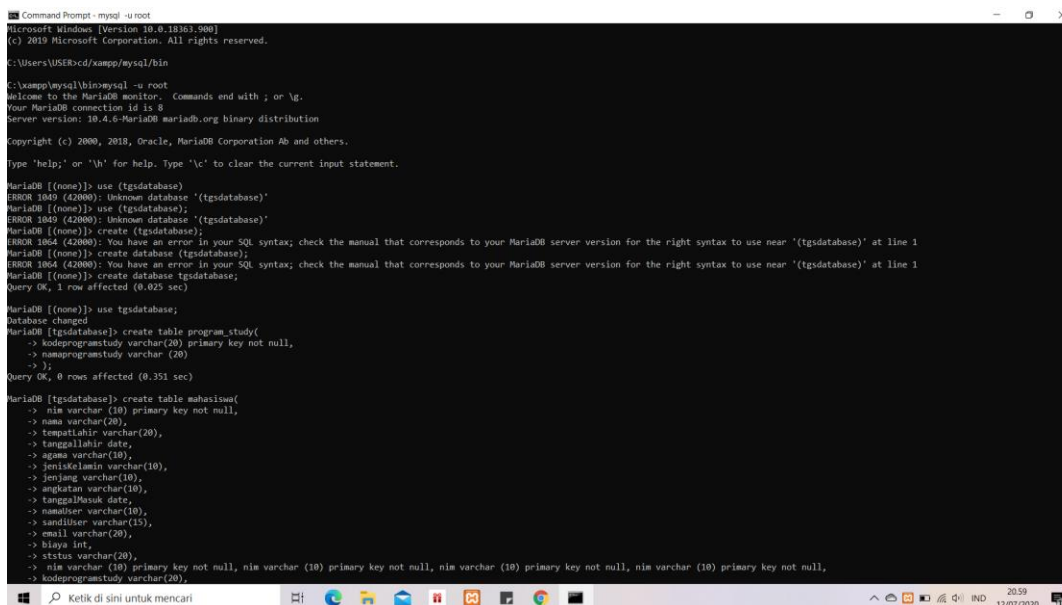
“cd/xampp/mysql/bin” lalu klik enter

Dan selanjutnya ketik “mysql –u root”

Lalu lanjut dengan script yang ada di foto dibawah ini :

“jika ada bacaan error seperti gambar di bawah jng di ikuti”

“jika tidak error maka hasilnya akan Query Ok, 0 rows affected (0.251 sec)



```
Command Prompt - mysql -u root

MariaDB [tgsdatabase]: create table mahasiswa(
  -> nim varchar(10) primary key not null,
  -> nama varchar(20),
  -> tempatlahir varchar(20),
  -> tanggalahir date,
  -> agama varchar(10),
  -> jeniskelamin varchar(10),
  -> jenjang varchar(10),
  -> angkatan varchar(10),
  -> tanggalMasuk date,
  -> namauser varchar(10),
  -> sandiuser varchar(15),
  -> email varchar(20),
  -> biaya int,
  -> status varchar(20),
  -> kodeprogramstudy varchar(20),
  -> foreign key (kodeprogramstudy) references program_study (kodeprogramstudy)
  -> );
Query OK, 0 rows affected (0.393 sec)

MariaDB [tgsdatabase]: create table dosen(
  -> nip varchar(20) primary key not null,
  -> nama varchar(20),
  -> tempatlahir varchar(15),
  -> tanggalahir date,
  -> agama varchar(10),
  -> jeniskelamin varchar(10),
  -> status varchar(10),
  -> pendidikanterakhir varchar(15),
  -> namauser varchar(10),
  -> sandiuser varchar(10),
  -> email varchar(20)
  -> );
Query OK, 0 rows affected (0.256 sec)

MariaDB [tgsdatabase]: create table alamat(
  -> idAlamat int primary key not null,
  -> Alamat text,
  -> kota varchar(15),
  -> propinsi varchar(15),
  -> kdpst varchar(10),
  -> noTelp varchar(15),
  -> noHP varchar(15),
  -> email varchar(20),
  -> nim varchar(10),
  -> nip varchar(20),
  -> foreign key (nim) references mahasiswa (nim),
  -> foreign key (nip) references dosen (nip)
  -> );
Query OK, 0 rows affected (0.251 sec)
```

```
Command Prompt - mysql -u root

MariaDB [tgsdatabase]: create table pendidikan(
  -> idPendidikan int primary key not null,
  -> namaSekolah varchar(20),
  -> Kota varchar(10),
  -> jenjang varchar(10),
  -> tahunlulus varchar(20),
  -> gelar varchar(20),
  -> nim varchar(10),
  -> nip varchar(20),
  -> foreign key (nim) references mahasiswa (nim),
  -> foreign key (nip) references dosen (nip)
  -> );
Query OK, 0 rows affected (0.369 sec)

MariaDB [tgsdatabase]: create table alumni(
  -> idPekerjaan int primary key not null,
  -> pekerjaan varchar(15),
  -> namaPerusahaan varchar(20),
  -> alamatPerusahaan varchar(20),
  -> kota varchar(10),
  -> bagian varchar(20),
  -> jobdesk text,
  -> jabatan varchar(20),
  -> tanggalmasuk varchar(15),
  -> nim varchar(10),
  -> foreign key (nim) references mahasiswa (nim)
  -> );
Query OK, 0 rows affected (0.286 sec)

MariaDB [tgsdatabase]: create table proposalta(
  -> kodeLugasAkhir int primary key not null,
  -> nipPembimbing1 varchar(20),
  -> nipPembimbing2 varchar(20),
  -> judul varchar(20),
  -> tanggalPengajuan date,
  -> status varchar(15),
  -> fileProposal varchar(20),
  -> tanggalkeputusan date,
  -> penilai varchar(20),
  -> nilaiJah varchar(10),
  -> nim varchar(10),
  -> nip varchar(20),
  -> foreign key (nim) references mahasiswa (nim),
  -> foreign key (nip) references dosen (nip),
  -> username Vachar(20),
  -> foreign key (username) references admin (username)
  -> );
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'references dosen (nip),
username Vachar(20),
foreign key (username) references a' at line 15
```

```
Command Prompt - mysql -u root

username Varchar(20),
foreign key (username) references a' at line 15
MariaDB [tgsdatabase]: create table bimbingan(
-> idbimbingan int primary key not null,
-> tanggal date,
-> status varchar(20),
-> namafile varchar(10),
-> ukuranfile varchar(10),
-> direktori varchar(10),
-> nim varchar(10),
-> nip Varchar(20),
-> foreign key (nim) references mahasiswa (nim),
-> foreign key (nip) references dosen (nip)
-> );
Query OK, 0 rows affected (0.323 sec)

MariaDB [tgsdatabase]: create table kategori_berita(
-> idkategori int primary key not null,
-> namakategori varchar(20)
-> );
Query OK, 0 rows affected (0.225 sec)

MariaDB [tgsdatabase]: create table admin(
-> username varchar(20) primary key not null,
-> password varchar(20),
-> nama_lengkap varchar(30),
-> email varchar(20),
-> level varchar(10)
-> );
Query OK, 0 rows affected (0.195 sec)

MariaDB [tgsdatabase]: create table berita(
-> idberita int primary key not null,
-> judul varchar(10),
-> isi_berita text,
-> gambar varchar(20),
-> hari varchar(20),
->
-> hari varchar(20),
->
->
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 8
MariaDB [tgsdatabase]: create table berita(
-> idberita int primary key not null,
-> judul varchar(10),
-> isi_berita text,
-> gambar varchar(20),
-> hari varchar(20),
-> tanggal date,
-> jam time,
-> counter int,
->
Ketik di sini untuk mencari
```

```
Command Prompt - mysql -u root

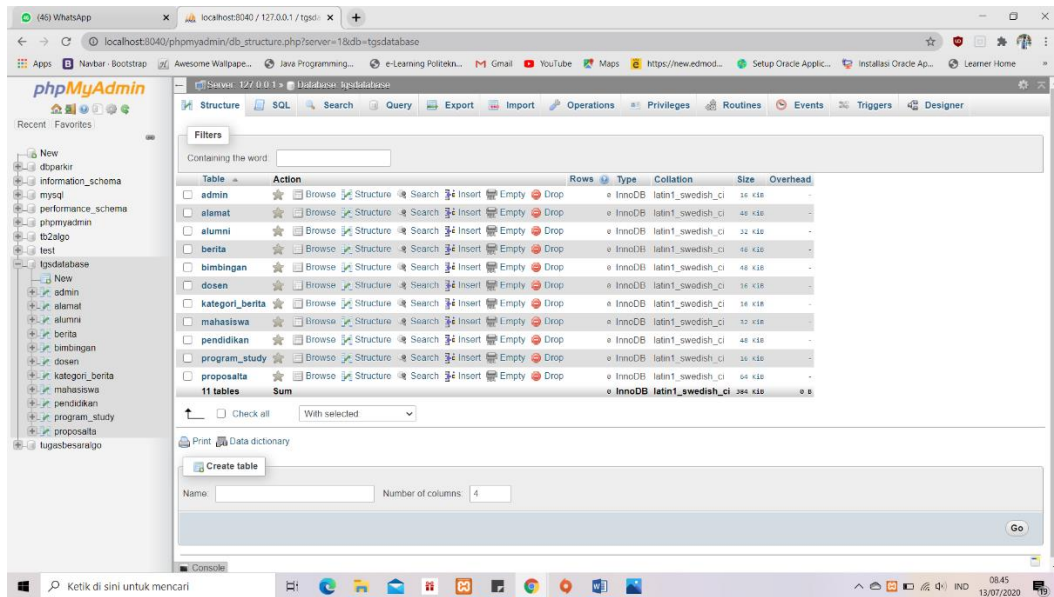
-> jam time,
-> counter int,
-> idkategori int,
-> username varchar(20),
-> foreign key (idkategori) references kategori_berita (idkategori),
-> foreign key (username) references admin (username)
-> );
Query OK, 0 rows affected (0.300 sec)

MariaDB [tgsdatabase]: create table proposalta(
-> kodeugasakhir int primary key not null,
-> nipPembimbing1 varchar(20),
-> nipPembimbing2 varchar(20),
-> judul varchar(25),
-> tanggal_pengajuan date,
-> status varchar(20),
-> fileProposal varchar(20),
-> tanggalPengajuan date,
-> penilai varchar(20),
-> no_ijazah varchar(30),
-> nim varchar(10),
-> nip varchar(20),
-> username varchar(20),
-> foreign key (nim) references mahasiswa (nim),
-> foreign key (nip) references dosen (nip),
-> foreign key (username) references admin (username)
-> );
Query OK, 0 rows affected (0.266 sec)

MariaDB [tgsdatabase]: show tables;
+-----+
| Tables_in_tgsdatabase |
+-----+
| admin                  |
| alamat                |
| alumni                |
| berita                 |
| bimbingan              |
| dosen                  |
| kategori_berita        |
| mahasiswa              |
| pendidikan             |
| program_study          |
| proposalta             |
+-----+
11 rows in set (0.003 sec)

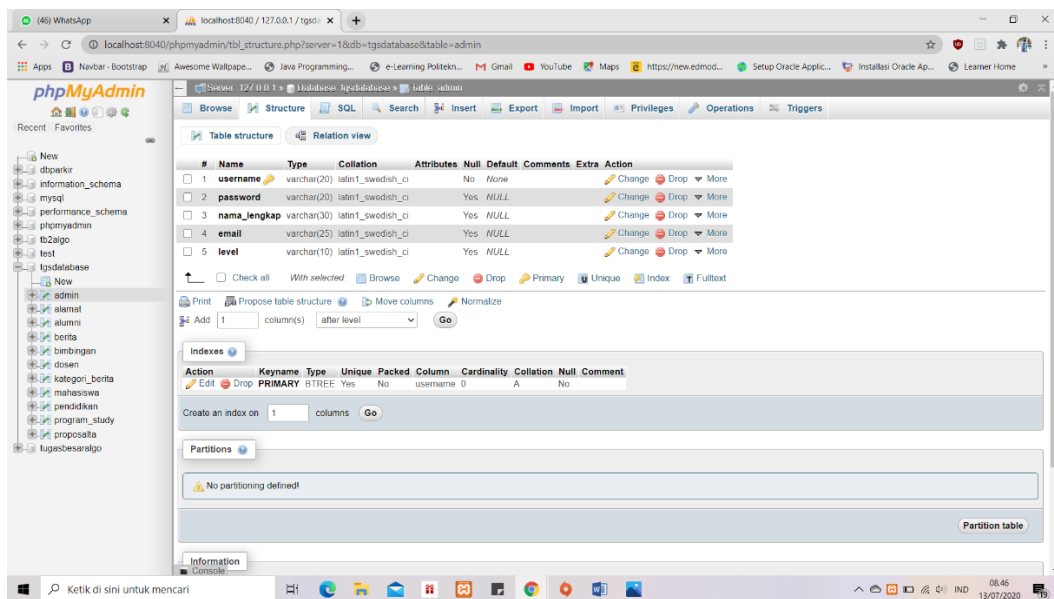
MariaDB [tgsdatabase]:
```

jika semua scripnya sudah lalu buka di web localhost/phpmyadmin akan tampil seperti foto Yang dibawah ini :



Setelah seperti ini kita akan melihat struktur dari table yang sudah kita buat:

Struktur pada table admin



Struktur pada table alamat

The screenshot shows the phpMyAdmin interface for a database named 'tgsdatabase'. The 'Table structure' view for the 'alamat' table is displayed. The table has 10 columns: idAlamat, Alamat, kota, propinsi, kdpost, noTelp, noHP, email, nim, and nip. The 'idAlamat' column is the primary key. The 'Indexes' section shows the primary key index on 'idAlamat'.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	idAlamat	int(11)			No	None			Change Drop More
2	Alamat	text	latin1_swedish_ci		Yes	NULL			Change Drop More
3	kota	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	propinsi	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	kdpost	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	noTelp	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	noHP	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
8	email	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
9	nim	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
10	nip	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	idAlamat	0	A	No	
Edit Drop	nim	BTREE	No	No	nim	0	A	Yes	
Edit Drop	nip	BTREE	No	No	nip	0	A	Yes	

Struktur pada table alumni

The screenshot shows the phpMyAdmin interface for a database named 'tgsdatabase'. The 'Table structure' view for the 'alumni' table is displayed. The table has 10 columns: idPekerjaan, pekerjaan, namaPerusahaan, alamatPerusahaan, kota, bagian, jobdesk, jabatan, tanggalmasuk, and nim. The 'idPekerjaan' column is the primary key. The 'Indexes' section shows the primary key index on 'idPekerjaan'.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	idPekerjaan	int(11)			No	None			Change Drop More
2	pekerjaan	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	namaPerusahaan	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	alamatPerusahaan	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	kota	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	bagian	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	jobdesk	text	latin1_swedish_ci		Yes	NULL			Change Drop More
8	jabatan	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
9	tanggalmasuk	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
10	nim	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	idPekerjaan	0	A	No	
Edit Drop	nim	BTREE	No	No	nim	0	A	Yes	

Struktur pada table berita

The screenshot shows the phpMyAdmin interface for the 'tgsdatabase' database. The 'berita' table structure is displayed with the following columns:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	idberita	int(11)			No	None			Change Drop More
2	judul	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	isi_berita	text	latin1_swedish_ci		Yes	NULL			Change Drop More
4	gambar	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	hari	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	tanggal	date			Yes	NULL			Change Drop More
7	jam	time			Yes	NULL			Change Drop More
8	counter	int(11)			Yes	NULL			Change Drop More
9	idkategori	int(11)			Yes	NULL			Change Drop More
10	username	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	idberita	0	A	No	
Edit Drop	idkategori	BTREE	No	No	idkategori	0	A	Yes	
Edit Drop	username	BTREE	No	No	username	0	A	Yes	

Struktur pada table bimbingan

The screenshot shows the phpMyAdmin interface for the 'tgsdatabase' database. The 'bimbingan' table structure is displayed with the following columns:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	idbimbingan	int(11)			No	None			Change Drop More
2	tanggal	date			Yes	NULL			Change Drop More
3	status	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	namafille	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	ukuranfile	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	direktory	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	nim	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
8	nip	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	idbimbingan	0	A	No	
Edit Drop	nim	BTREE	No	No	nim	0	A	Yes	
Edit Drop	nip	BTREE	No	No	nip	0	A	Yes	

Struktur pada table dosen

The screenshot shows the phpMyAdmin interface for the 'dosen' table. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	nlp	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
2	nama	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	tempatLahir	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	tanggalLahir	date			Yes	NULL			Change Drop More
5	agama	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	jeniskelamin	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	status	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
8	pendidikanTerakhir	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
9	namaUser	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
10	sandiUser	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
11	email	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	nlp	0	A	No	

Create an index on 1 columns Go

Struktur pada table kategori_berita

The screenshot shows the phpMyAdmin interface for the 'kategori_berita' table. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	idKategori	int(11)			No	None			Change Drop More
2	namaKategori	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	idKategori	0	A	No	

Create an index on 1 columns Go

Partitions: No partitioning defined

Information:

Space usage		Row statistics	
Data	16 KiB	Format	dynamic
Index	9 B	Collation	latin1_swedish_ci
		Next autoindex	

Struktur pada table mahasiswa

The screenshot shows the phpMyAdmin interface for the 'mahasiswa' table. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	nim	varchar(10)	latin1_swedish_ci		No	None			Change Drop More
2	nama	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	tempatLahir	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	tanggalahir	date			Yes	NULL			Change Drop More
5	agama	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	jenisKelamin	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	jenjang	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
8	angkatan	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
9	tanggalMasuk	date			Yes	NULL			Change Drop More
10	namaUser	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
11	email	varchar(15)	latin1_swedish_ci		Yes	NULL			Change Drop More
12	email	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
13	diaya	int(11)			Yes	NULL			Change Drop More
14	status	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
15	kodprogramstudy	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	nim	0	A	No	

Struktur pada table pendidikan

The screenshot shows the phpMyAdmin interface for the 'pendidikan' table. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	idPendidikan	int(11)			No	None			Change Drop More
2	namaSekolah	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	Kota	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	jenjang	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	tahunLulus	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
6	gelar	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	nim	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
8	nip	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	idPendidikan	0	A	No	
Edit Drop	nim	BTREE	No	No	nim	0	A	Yes	
Edit Drop	nip	BTREE	No	No	nip	0	A	Yes	

Struktur pada table program_study

The screenshot shows the phpMyAdmin interface for the 'program_study' table. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	kodeprogramstudy	varchar(20)	latin1_swedish_ci		No	None			Change Drop More
2	namaprogramstudy	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	kodeprogramstudy	0	A	No	

Partitions: No partitioning defined.

Information:

Space usage	Row statistics
Data: 16 KB	Format: dynamic
Index: 8 B	Collation: latin1_swedish_ci
	Next autoindex: 0

Struktur pada table proposalta

The screenshot shows the phpMyAdmin interface for the 'proposalta' table. The table structure is as follows:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	kodeTugasAkhir	int(11)			No	None			Change Drop More
2	nipPembimbing1	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
3	nipPembimbing2	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
4	judul	varchar(25)	latin1_swedish_ci		Yes	NULL			Change Drop More
5	tanggal_pengajuan	date			Yes	NULL			Change Drop More
6	status	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
7	fileProposal	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
8	tanggalPengajuan	date			Yes	NULL			Change Drop More
9	penilai	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
10	no_jazah	varchar(30)	latin1_swedish_ci		Yes	NULL			Change Drop More
11	nim	varchar(10)	latin1_swedish_ci		Yes	NULL			Change Drop More
12	nip	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More
13	username	varchar(20)	latin1_swedish_ci		Yes	NULL			Change Drop More

Indexes:

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	kodeTugasAkhir	0	A	No	
Edit Drop	nim	BTREE	No	No	nim	0	A	Yes	
Edit Drop	username	BTREE	No	No	username	0	A	Yes	

Selanjutnya klik DataBase “tgsdatabase” kemudian klik lagi “Designer” kita akan melihat relasi antar tiap table ke table lainnya

