1. **Write SQL Query to create following table (Student).**

Fields	Datatypes	Null	Key	Default	Check	Extra
student_id	int(11)	No	Primary			Auto_Increment
name	varchar(50)	No				Unique
address	varchar(100)	No		Birtamode		
class_id	int(11)	No	Foreign			
section	varchar(50)	Yes				
Age	int(11)	No		16	Age>=15	

Note: Foreign key references to (Class) Table.

SQL QUERY:

```
create database pragati;


create table class (
        class_id int primary key
);


create table student
(
        student_id int primary key auto_increment,
        name varchar (50) NOT NULL,
        address varchar (100) default 'Birtamode' NOT NULL,
        class_id int NOT NULL,
        section varchar (50),
        age int default 16 NOT NULL,
        CONSTRAINT st_na_un unique(name),
        CONSTRAINT st_ag_ch check(age>=15),
        CONSTRAINT st_ci_fk foreign key(class_id) references class(class_id)

);
```

Database pragati:

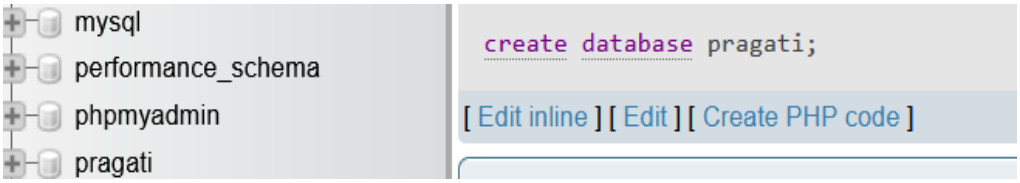


Table class:

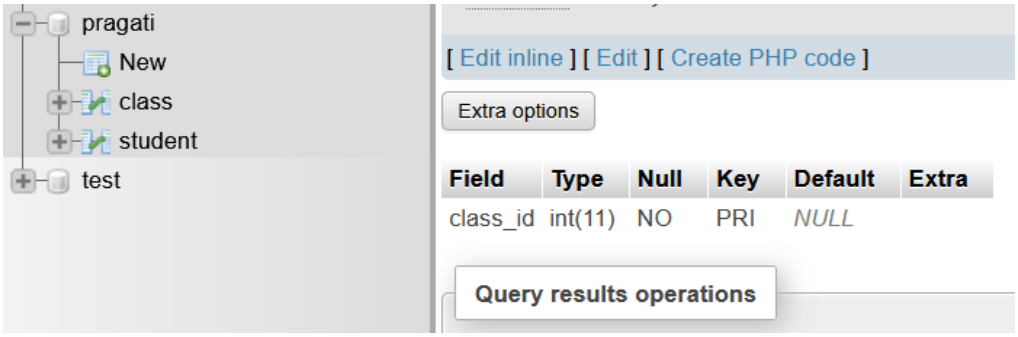
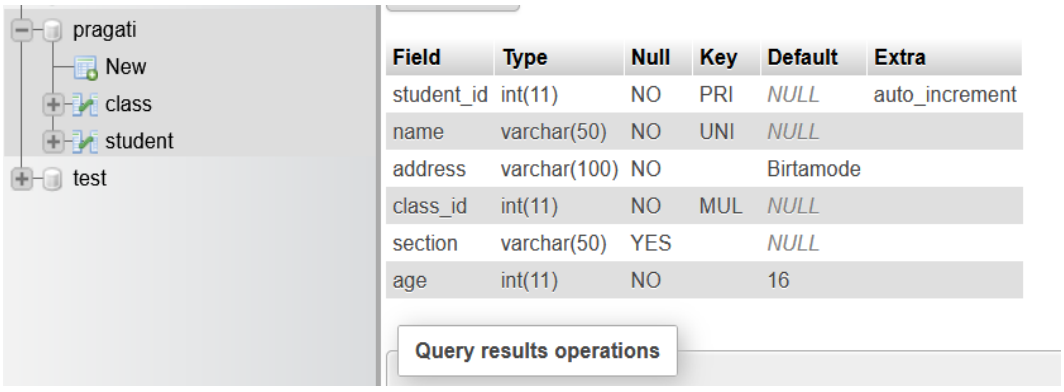


Table student:



2. **Write SQL query to drop primary key from above table.**

SQL QUERY:

alter table student modify student_id int;

alter table student drop primary key;

Table after removing auto_increment from student_id:

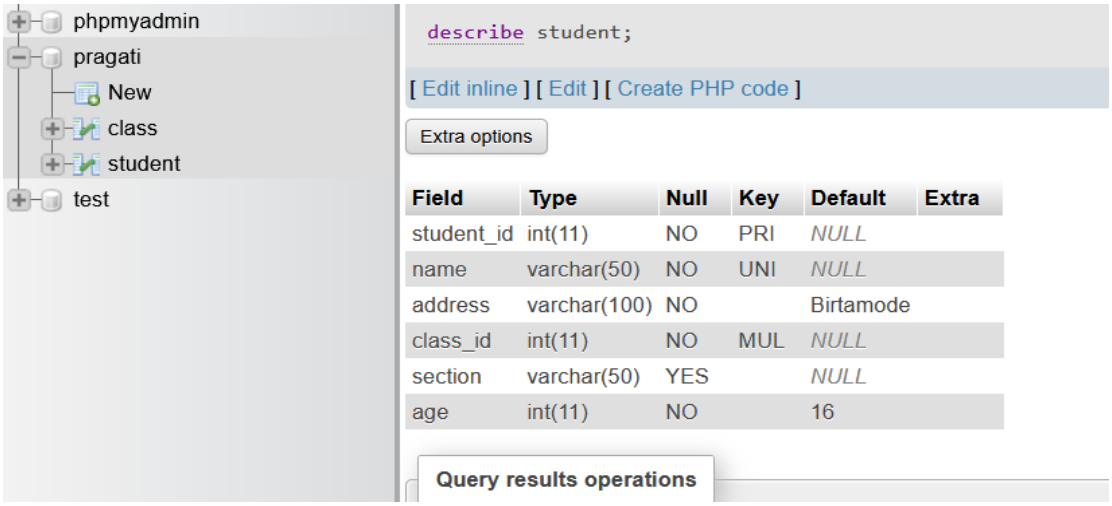
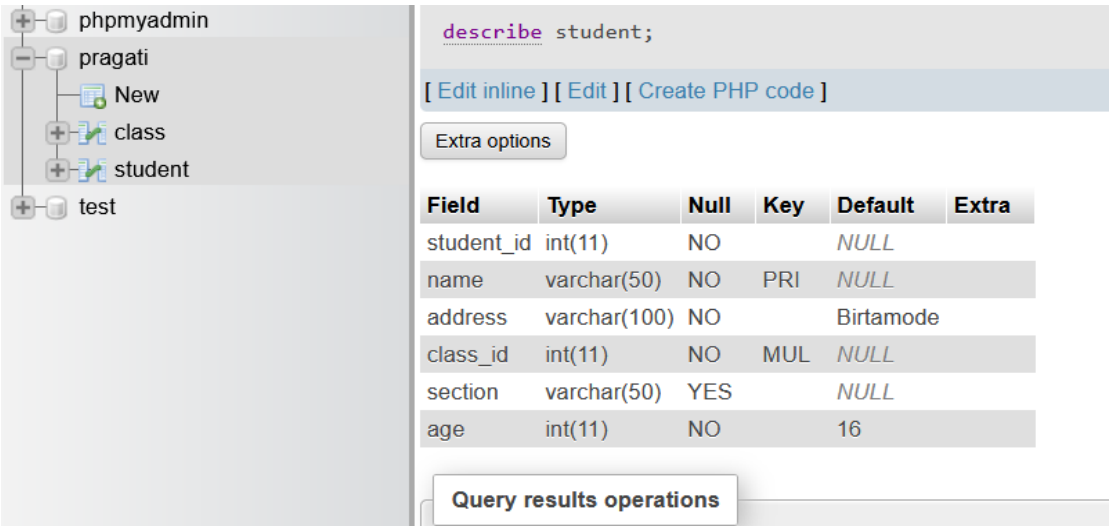


Table after removing primary key from student_id:

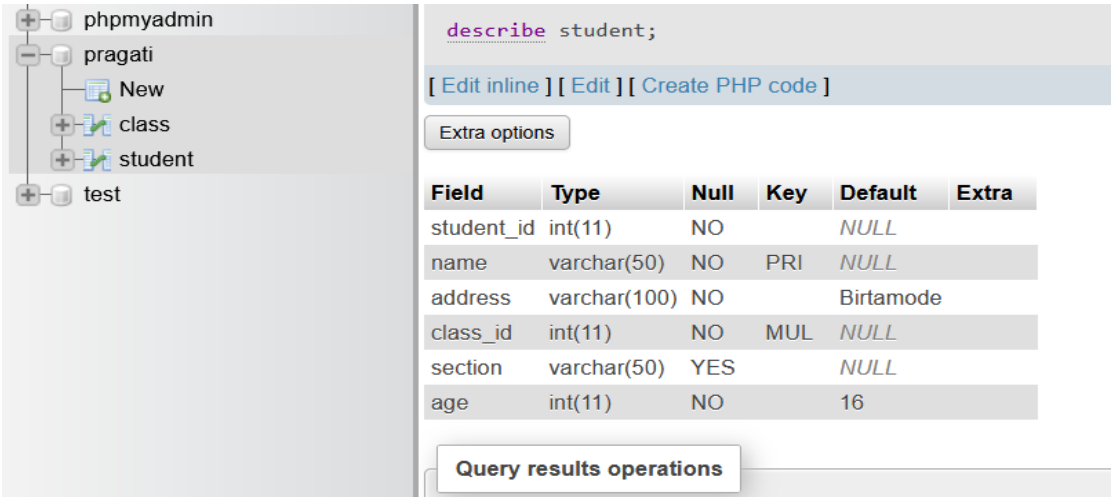


3. **Write SQL query to drop foreign key from above table.**

SQL QUERY:

alter table student drop foreign key st_ci_fk;

Table student after removing foreign key from class_id attribute:

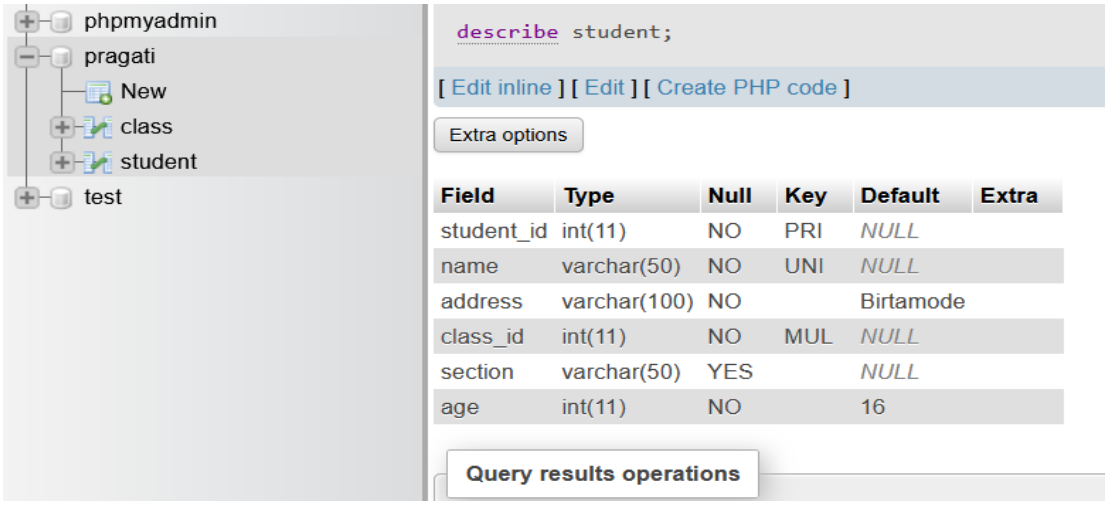


4. **Write SQL query to set student id as primary key.**

SQL QUERY:

alter table student add primary key (student_id);

Table student after adding primary key to student_id:

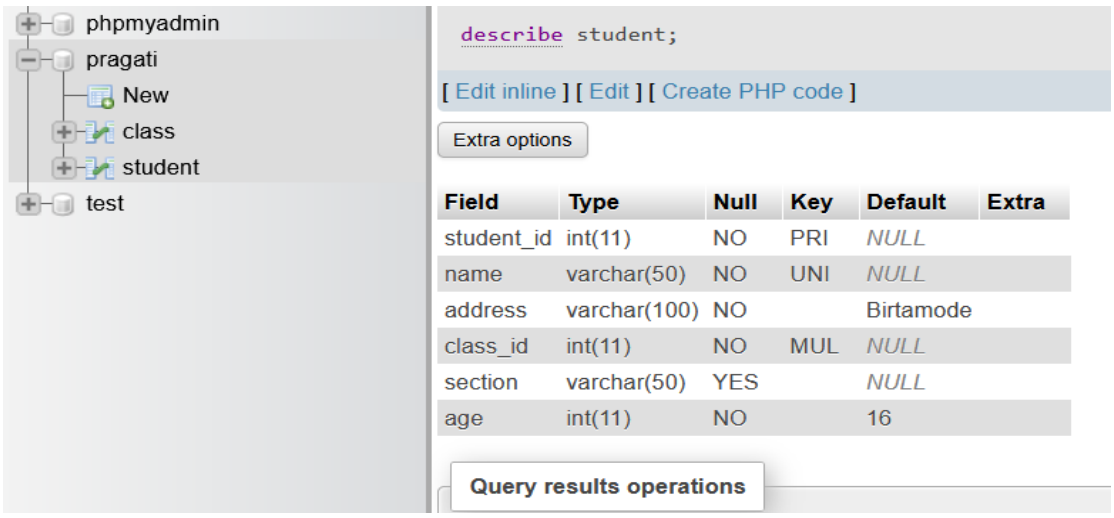


5. **Write SQL query to set class id as foreign key.**

SQL QUERY:

alter table student add foreign key (class_id) references class(class_id);

Table student after adding foreign key to class id taking reference from class table:

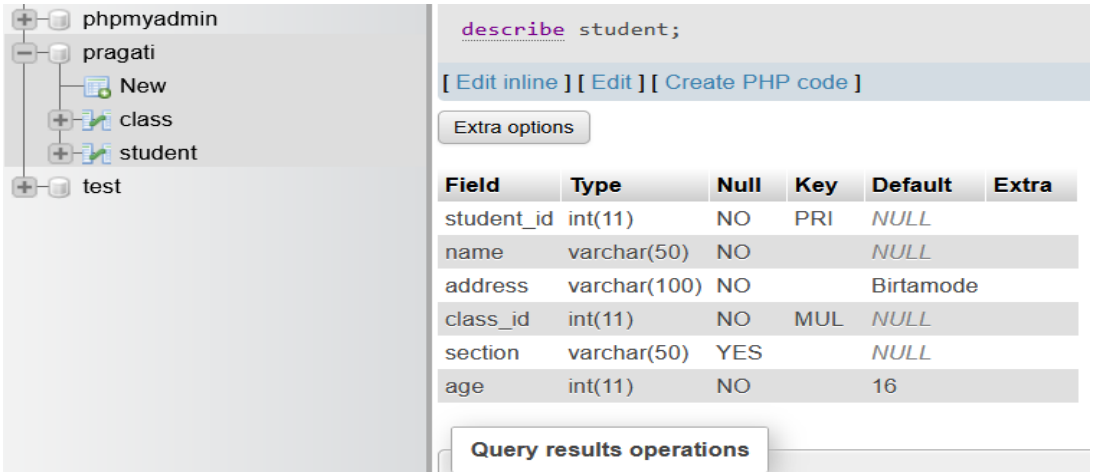


6. **Write SQL query to remove unique constraint from name.**

SQL QUERY:

alter table student drop constraint st_na_un;

Table student after removing unique constraint from name attribute:

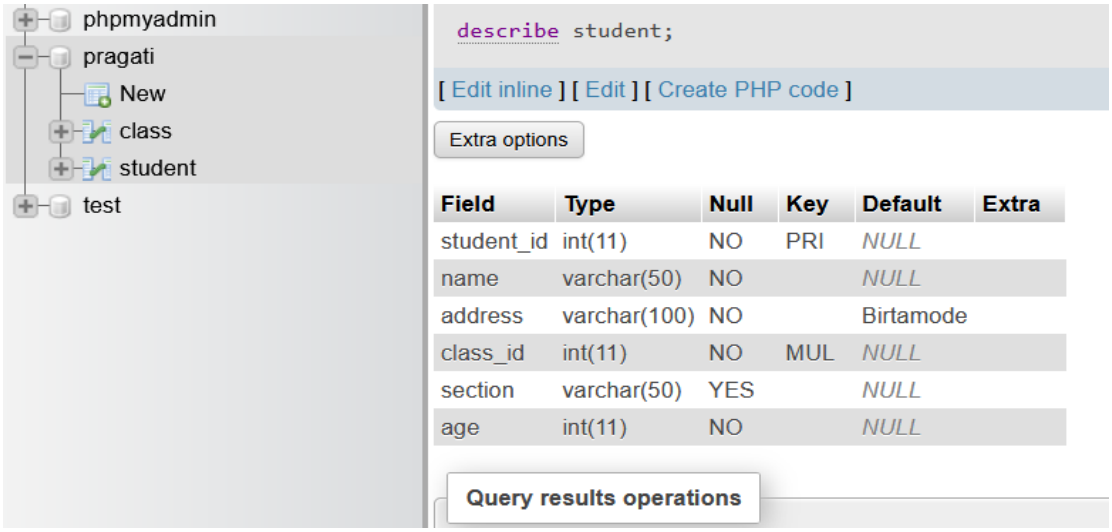


7. **Write SQL query to remove default constraint from age.**

SQL QUERY:

alter table student alter column age drop default;

Table student after removing default constraint from age:

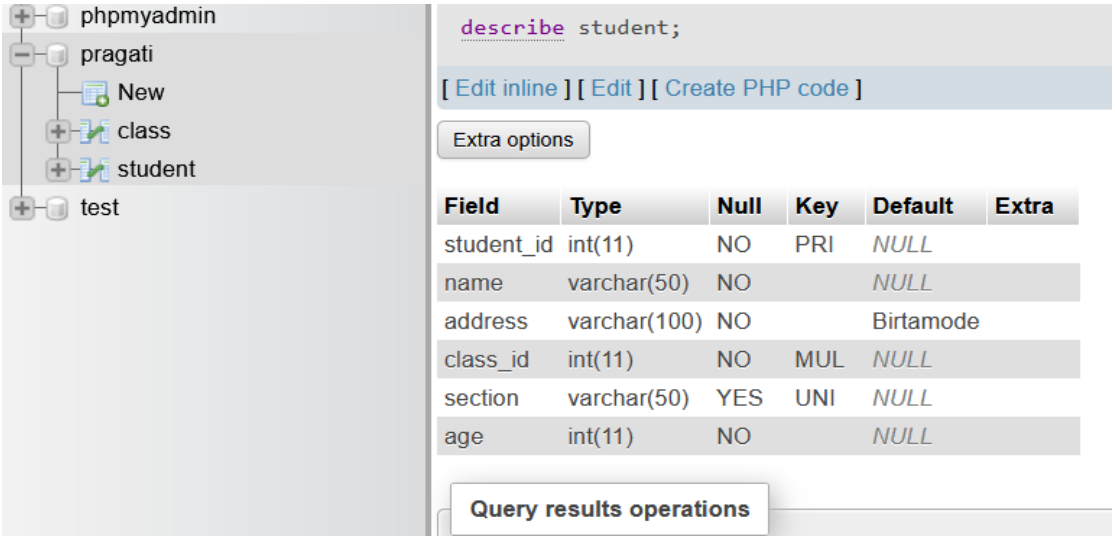


8. **Write SQL query to add unique constraint to section.**

SQL QUERY:

alter table student add constraint unique(section);

Table student after adding unique constraints to section:

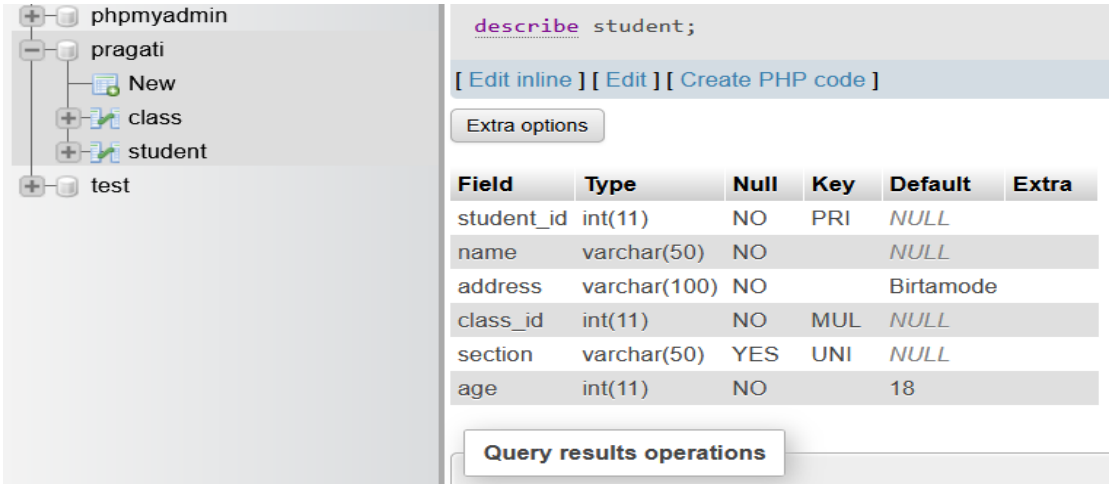


9. **Write SQL query to add default value 18 to age.**

SQL QUERY:

alter table student alter column age set default 18;

Table student after adding default value 18 to age:

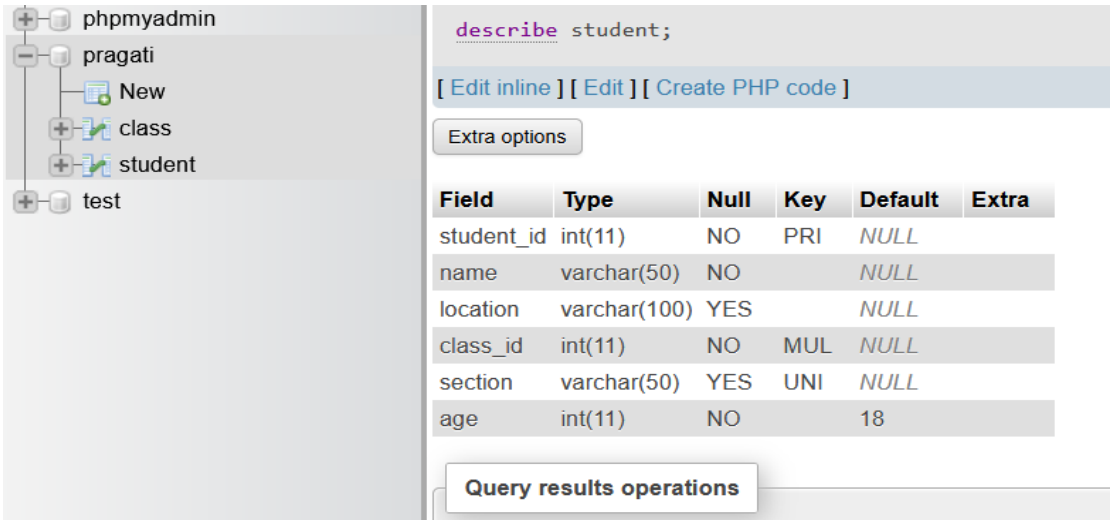


10. **Write SQL query to change column name address to location.**

SQL QUERY:

alter table student change address location varchar(100);

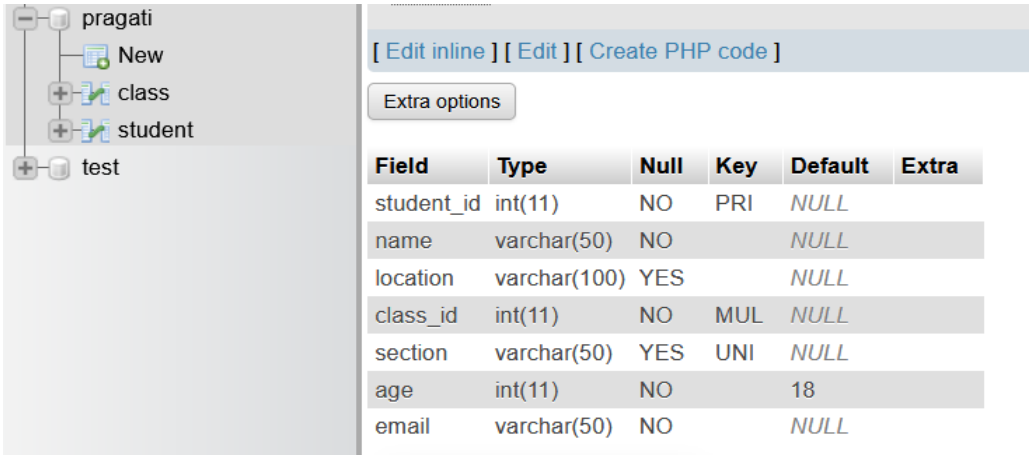
Table after changing column name address to location:



11. Write SQL query to add new column email and make it not null.

SQL QUERY:

Table student after adding email column:

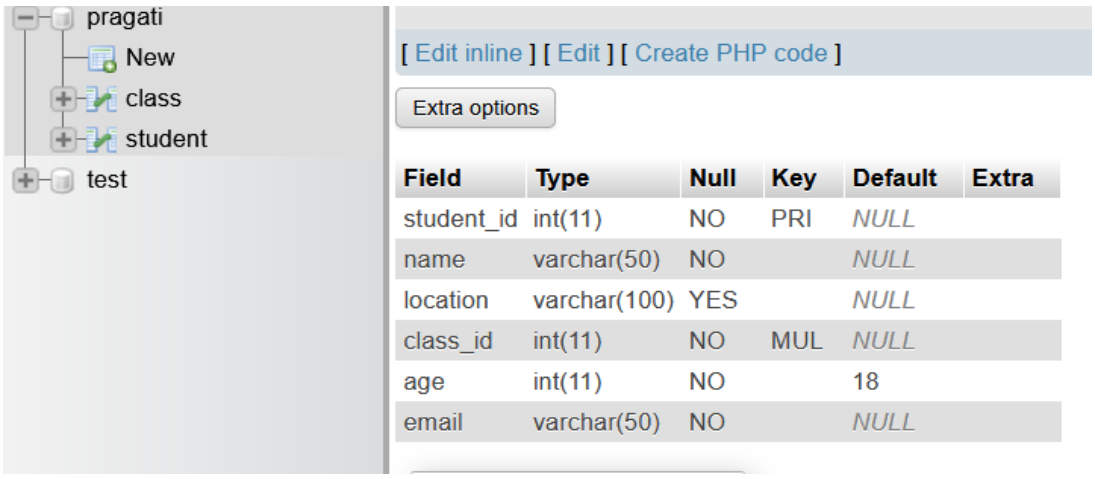


Field	Type	Null	Key	Default	Extra
student_id	int(11)	NO	PRI	*NULL*	
name	varchar(50)	NO		*NULL*	
location	varchar(100)	YES		*NULL*	
class_id	int(11)	NO	MUL	*NULL*	
section	varchar(50)	YES	UNI	*NULL*	
age	int(11)	NO		18	
email	varchar(50)	NO		*NULL*	

12. Write SQL query to remove column section from above table.

SQL QUERY:

Table student after removing column section:

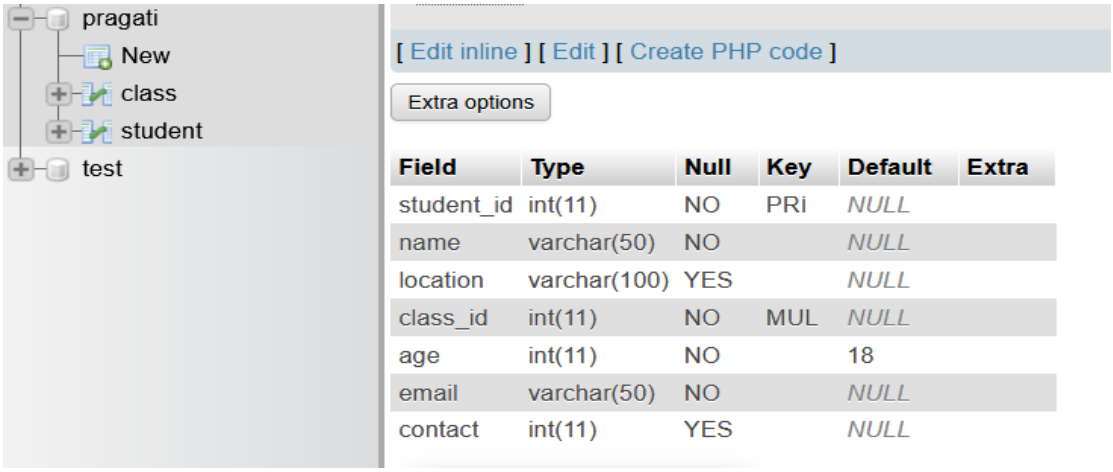


Field	Type	Null	Key	Default	Extra
student_id	int(11)	NO	PRI	*NULL*	
name	varchar(50)	NO		*NULL*	
location	varchar(100)	YES		*NULL*	
class_id	int(11)	NO	MUL	*NULL*	
age	int(11)	NO		18	
email	varchar(50)	NO		*NULL*	

13. Write SQL query to add new column contact and make data type as integer.

SQL QUERY:

Table student after adding column contact:

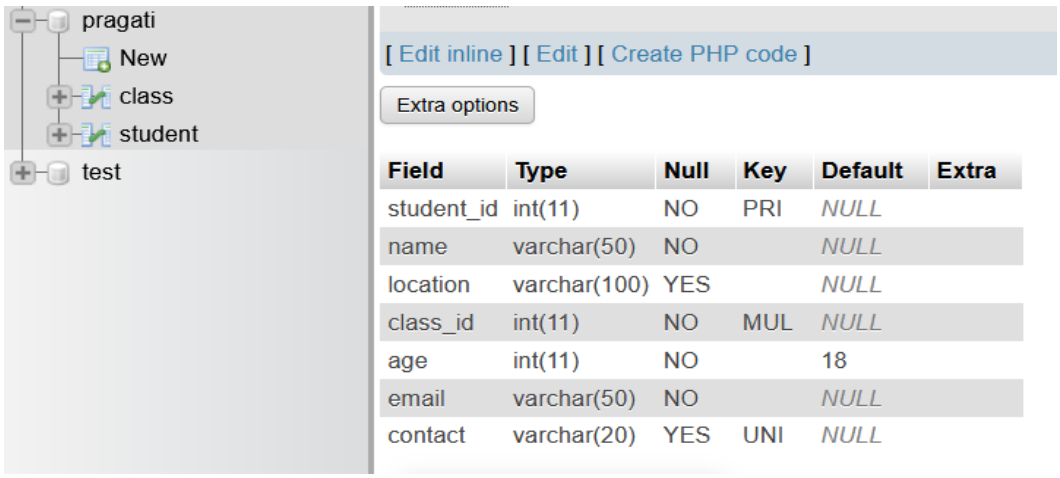


Field	Type	Null	Key	Default	Extra
student_id	int(11)	NO	PRi	*NULL*	
name	varchar(50)	NO		*NULL*	
location	varchar(100)	YES		*NULL*	
class_id	int(11)	NO	MUL	*NULL*	
age	int(11)	NO		18	
email	varchar(50)	NO		*NULL*	
contact	int(11)	YES		*NULL*	

14. Write SQL query to change data type of column contact to varchar and make it unique.

SQL QUERY:

Table student after modifying data type of column contact to varchar:

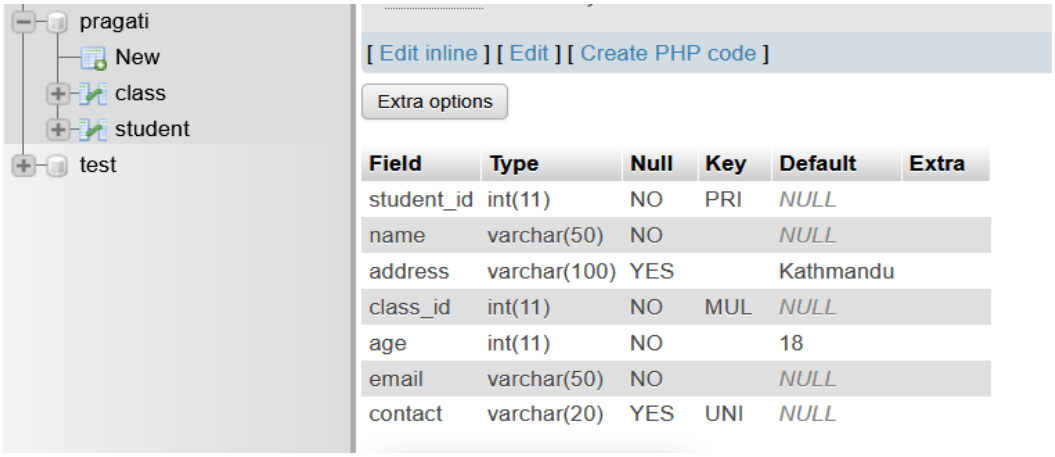


Field	Type	Null	Key	Default	Extra
student_id	int(11)	NO	PRI	*NULL*	
name	varchar(50)	NO		*NULL*	
location	varchar(100)	YES		*NULL*	
class_id	int(11)	NO	MUL	*NULL*	
age	int(11)	NO		18	
email	varchar(50)	NO		*NULL*	
contact	varchar(20)	YES	UNI	*NULL*	

15. Write SQL query to change default value of address to Kathmandu.

SQL QUERY:

Table student after changing default value of the address to Kathmandu:



Field	Type	Null	Key	Default	Extra
student_id	int(11)	NO	PRI	*NULL*	
name	varchar(50)	NO		*NULL*	
address	varchar(100)	YES		Kathmandu	
class_id	int(11)	NO	MUL	*NULL*	
age	int(11)	NO		18	
email	varchar(50)	NO		*NULL*	
contact	varchar(20)	YES	UNI	*NULL*	

16. Insert five set of records in above table.

SQL QUERY:

Table class after inserting five sets of records:

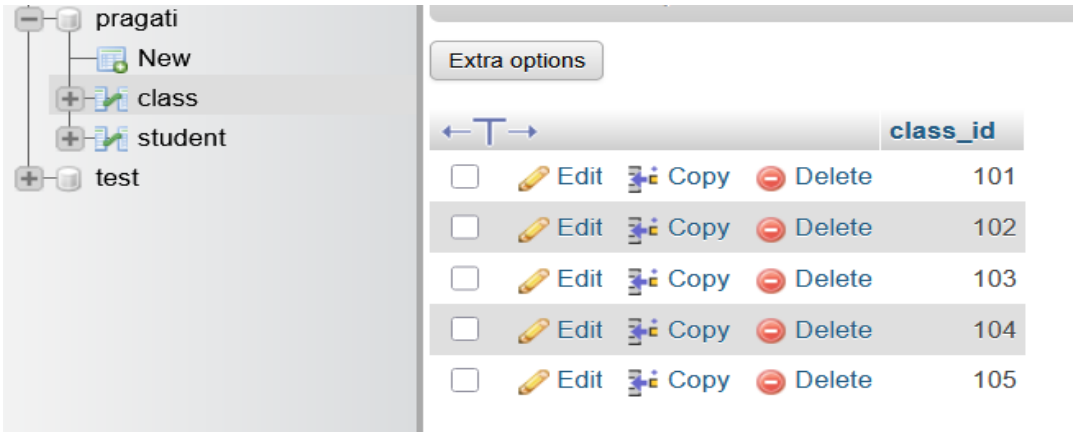
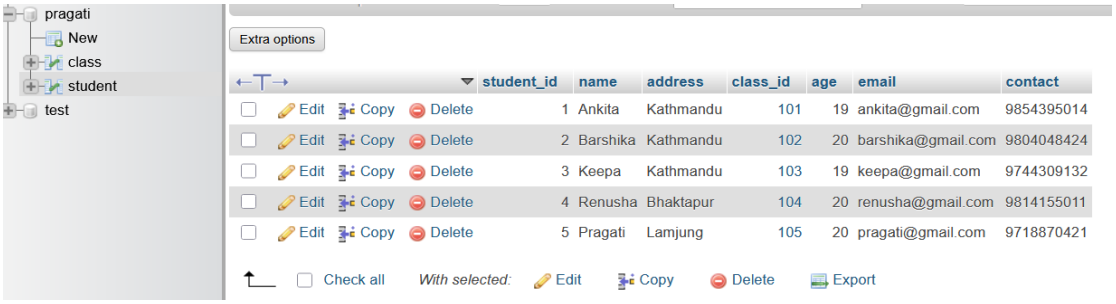


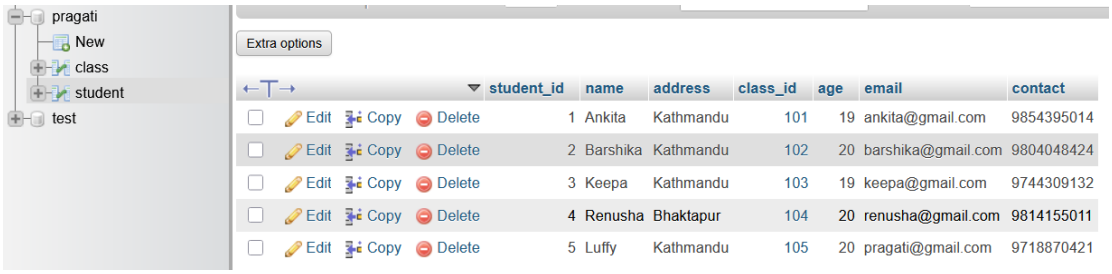
Table student after inserting five sets of records:



17. Write SQL query to update name and address of student whose student id is 5.

SQL QUERY:

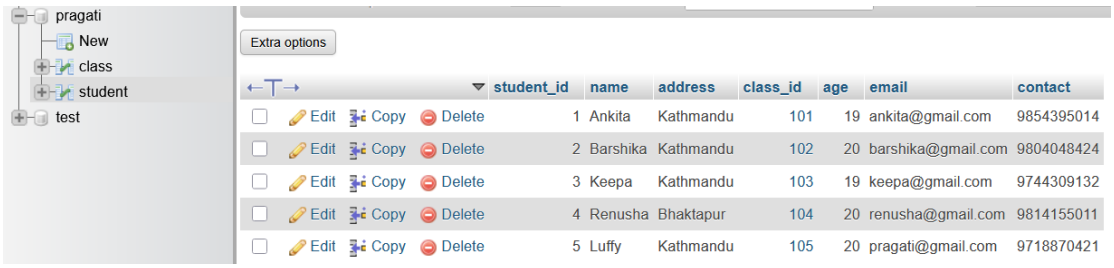
Table student after updating name and address of student having student_id 5:



18. Write SQL query to delete all the records of student having age greater than 20.

SQL QUERY:

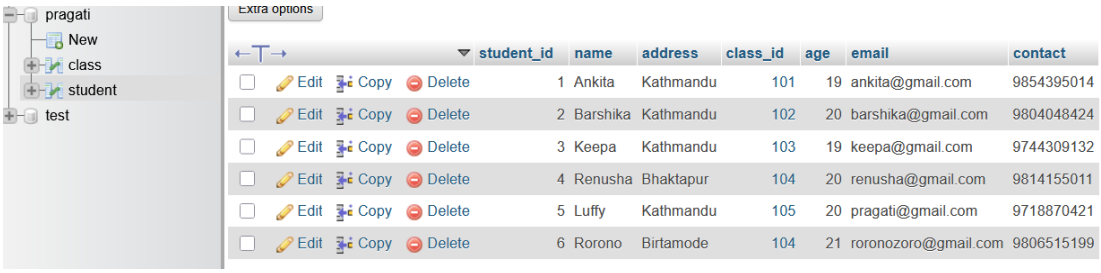
Table student after removing student having age greater than 20:



19. Write SQL query to update age of student having address btm.

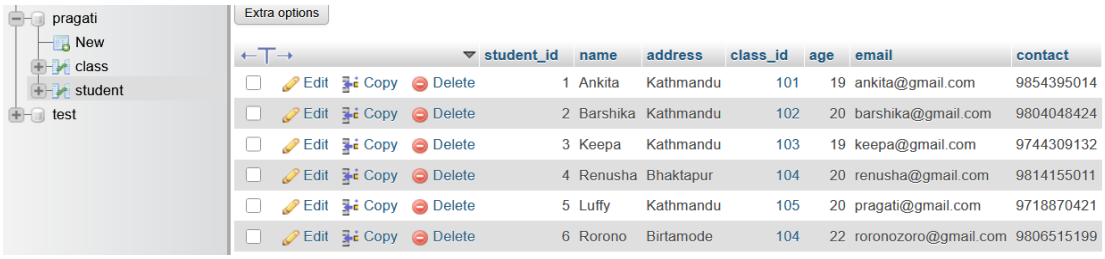
SQL QUERY:

Table student before upgrading age of student having address btm:



	student_id	name	address	class_id	age	email	contact
Edit Copy Delete	1	Ankita	Kathmandu	101	19	ankita@gmail.com	9854395014
Edit Copy Delete	2	Barshika	Kathmandu	102	20	barshika@gmail.com	9804048424
Edit Copy Delete	3	Keepa	Kathmandu	103	19	keepa@gmail.com	9744309132
Edit Copy Delete	4	Renusha	Bhaktapur	104	20	renusha@gmail.com	9814155011
Edit Copy Delete	5	Luffy	Kathmandu	105	20	pragati@gmail.com	9718870421
Edit Copy Delete	6	Rorono	Birtamode	104	21	roronozoro@gmail.com	9806515199

Table student after upgrading age of student having address btm:

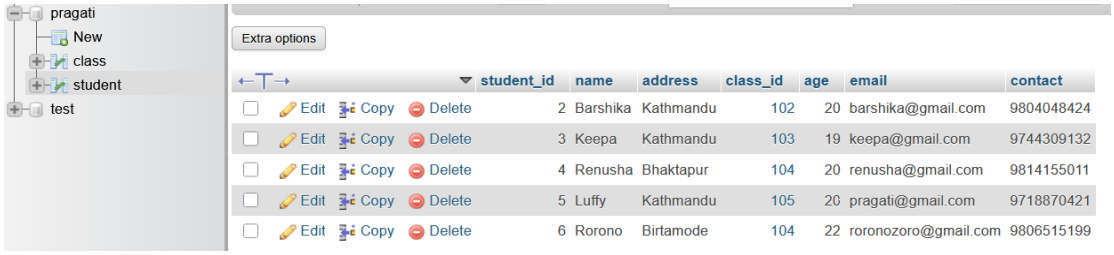


	student_id	name	address	class_id	age	email	contact
Edit Copy Delete	1	Ankita	Kathmandu	101	19	ankita@gmail.com	9854395014
Edit Copy Delete	2	Barshika	Kathmandu	102	20	barshika@gmail.com	9804048424
Edit Copy Delete	3	Keepa	Kathmandu	103	19	keepa@gmail.com	9744309132
Edit Copy Delete	4	Renusha	Bhaktapur	104	20	renusha@gmail.com	9814155011
Edit Copy Delete	5	Luffy	Kathmandu	105	20	pragati@gmail.com	9718870421
Edit Copy Delete	6	Rorono	Birtamode	104	22	roronozoro@gmail.com	9806515199

20. Write SQL query to delete all records of student having student id 1.

SQL QUERY:

Table student after deleting all records of student having student id 1:



	student_id	name	address	class_id	age	email	contact
Edit Copy Delete	2	Barshika	Kathmandu	102	20	barshika@gmail.com	9804048424
Edit Copy Delete	3	Keepa	Kathmandu	103	19	keepa@gmail.com	9744309132
Edit Copy Delete	4	Renusha	Bhaktapur	104	20	renusha@gmail.com	9814155011
Edit Copy Delete	5	Luffy	Kathmandu	105	20	pragati@gmail.com	9718870421
Edit Copy Delete	6	Rorono	Birtamode	104	22	roronozoro@gmail.com	9806515199