20 july.

mysql> use student info;

Database changed

mysql> insert into stud(rollno,name,per,address) values(01,'ram',87.88,'pune');

Query OK, 1 row affected (0.01 sec)

mysql> insert into stud values(02,'riya',78.98,'satara');

Query OK, 1 row affected (0.01 sec)

mysql> insert into stud values (03,'kittu',87.56,'sangli');

Query OK, 1 row affected (0.01 sec)

mysql> insert into stud value(04,'simran',70.98,'katraj');

Query OK, 1 row affected (0.01 sec)

mysql> alter table stud modify column address varchar(50);

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table stud modify column name varchar(50);

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table stud modify column per double;

Query OK, 4 rows affected (0.06 sec)

Records: 4 Duplicates: 0 Warnings: 0

```
nysql> select * from stud;
 rollno
                    per
                                         address
          name
                    87.87999725341797
          ram
                                         pune
      2
          riya
                     78.9800033569336
                                          satara
          kittu
                    87.55999755859375
                                          sangli
          simran
                     70.9800033569336
      4
                                          katraj
 rows in set (0.00 sec)
```

Add column

mysql> alter table stud add column email varchar(20);

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table stud add column mobileno varchar(10);

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table stud add column state varchar(20);

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
nysql> select * from stud;
 rollno |
          name
                                        address
                                                   email |
                                                           mobileno
                                                                       state
                    87.87999725341797
          ram
                                                   NULL
                                                           NULL
                                                                       NULL
                                        pune
                                                                      NULL
          riya
                    78.9800033569336
                                        satara
                                                   NULL
                                                           NULL
                   87.55999755859375
                                        sangli
          kittu
                                                   NULL
                                                           NULL
                                                                       NULL
                    70.9800033569336
          simran
                                        katraj
                                                   NULL
                                                           NULL
                                                                       NULL
 rows in set (0.00 sec)
```

Drop column

mysql> alter table stud change column name stud name varchar(20);

Query OK, 4 rows affected (0.09 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> alter table stud change column per stud per varchar(20);

Query OK, 4 rows affected (0.05 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> alter table stud change column rollno stud id varchar(20);

Query OK, 4 rows affected (0.06 sec)

Records: 4 Duplicates: 0 Warnings: 0

_	stud_name				mobileno	
1	ram	87.87999725341797	pune	NULL	NULL	NULL
2	riya	78.9800033569336	satara	NULL	NULL	NULL
3	kittu	87.55999755859375	sangli	NULL	NULL	NULL
4	simran	70.9800033569336	katraj	NULL	NULL	NULL

Constraint

Task 1:

+ Field	Type	++ Null Key Default Extra
stud_id stud_name stud_per address email mobileno state	varchar(20) varchar(20) varchar(20) varchar(50) varchar(20) varchar(10) varchar(20)	NO

mysql> alter table stud modify column stud name varchar(20) not null;

Query OK, 0 rows affected (0.06 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table stud modify column stud_per varchar(20) not null;

Query OK, 0 rows affected (0.06 sec)

Records: 0 Duplicates: 0 Warnings: 0

+	, +	+		+
Field	Type	Null	Key	Default Extra
+	varchar(20) varchar(20) varchar(20) varchar(50) varchar(20) varchar(10) varchar(20)	NO NO NO YES YES YES YES	PRI	NULL
+	+	+		++

Task 2.

mysql> create table persons (id int not null,lastname varchar(20) not null,firstname varchar(20) not null,age int not null);

Query OK, 0 rows affected (0.03 sec)

mysql> desc	persons;				
Field	Type	Null	Key	Default	Extra
id lastname firstname age +	int int varchar(20) varchar(20) int	NO NO NO NO	 	NULL NULL NULL NULL	

Check constraint

mysql> create table stud1(id int primary key,name varchar(20) not null,class varchar(20) check(class='fy' or class='sy' or class='ty'),age int not null check (age>=18 and age<=26),city varchar(20));

Query OK, 0 rows affected (0.03 sec)

mysql> desc stud1;

++ Field	Туре	†	Null		Key	Default	Extra
:	int varchar(20) varchar(20) int varchar(20)	ļ	NO NO YES NO YES		PRI	NULL NULL NULL NULL NULL	

mysql> insert into stud1 values(101, 'radha patil', 'ty', 21, 'kolhapur');

Query OK, 1 row affected (0.01 sec)

mysql> insert into stud1 values(102, 'roshni patil', 'fy', 18, 'karad');

Query OK, 1 row affected (0.01 sec)

mysql> insert into stud1 values(103, 'rohan khade', 'sy', 20, 'satara');

Query OK, 1 row affected (0.01 sec)

mysql> select * from stud1;

id na	ame	class	age	city
102 re	adha patil oshni patil ohan khade	fy	18	kolhapur karad satara