PASO 1 :

```
use employees; set autocommit=1; start transaction;
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	13:05:26	use employees	0 row(s) affected	0.000 sec
2	13:05:43	set autocommit=1	0 row(s) affected	0.000 sec
3	13:05:57	start transaction	0 row(s) affected	0.000 sec

PASOS 2-3:

```
insert into empleados(num_emp,fec_nac,nombre,apellido,genero,num_dep)
select * from employees
where emp_no in(select emp_no
                from departments
                where dept_no='d001')
and first_name='Maria'
and gender = 'M';
commit;
```

Action Output

#	Time	Action	Message	Duration / Fetch
2	16:04:15	start transaction	0 row(s) affected	0.000 sec
3	16:04:23	insert into empleados(num_emp,fec_nac,nombre,apellido,...	134 row(s) affected Records: 134 Duplicates: 0 Warning...	0.438 sec
4	16:04:37	commit	0 row(s) affected	0.000 sec

PASO 4 y 5:

```
set autocommit=on; start transaction;
update departamentos set nom_dep = 'Comercio' where nom_dep = 'Marketing';
update departamentos set nom_dep = 'Finanzas' where nom_dep = 'Finance';
update departamentos set nom_dep = 'Recursos Humanos' where nom_dep = 'Human Resources';
update departamentos set nom_dep = 'Producción' where nom_dep = 'Production';
update departamentos set nom_dep = 'Desarrollo' where nom_dep = 'Development';
update departamentos set nom_dep = 'Control de Calidad' where nom_dep = 'Quality Management';
update departamentos set nom_dep = 'Ventas' where nom_dep = 'Sales';
update departamentos set nom_dep = 'Investigación' where nom_dep = 'Research';
update departamentos set nom_dep = 'Atención al Cliente' where nom_dep = 'Customer Service';
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
10	16:15:54	update departamentos set nom_dep = 'Ventas' where no...	1 row(s) affected Rows matched: 1 Changed: 1 Warning...	0.000 sec
11	16:15:54	update departamentos set nom_dep = 'Investigación' whe...	1 row(s) affected Rows matched: 1 Changed: 1 Warning...	0.000 sec
12	16:15:54	update departamentos set nom_dep = 'Atención al Cliente...	1 row(s) affected Rows matched: 1 Changed: 1 Warning...	0.000 sec

PASO 6:

```
update departamentos set num_dep = substr(nom_dep, 1, 4);
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	16:57:15	update departamentos set num_dep = s...	Error Code: 1451. Cannot delete or upda...	0.015 sec

PASOS 7:

```
alter table departamentos rename column num_dep to cod_dep;
alter table empleados rename column num_dep to cod_dep;
alter table empleados drop constraint empleados_departamentos_FK;
alter table empleados add constraint empleados_departamentos_FK foreign key (
references departamentos(cod_dep) on update cascade;
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	17:03:05	alter table departamentos rename colum...	0 row(s) affected Records: 0 Duplicates...	0.016 sec
2	17:03:05	alter table empleados rename column nu...	0 row(s) affected Records: 0 Duplicates...	0.000 sec
3	17:03:05	alter table empleados drop constraint em...	0 row(s) affected Records: 0 Duplicates...	0.000 sec
4	17:03:05	alter table empleados add constraint em...	27 row(s) affected Records: 27 Duplicat...	0.062 sec

PASO 8:

```
341 •  rollback;
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	17:04:11	rollback	0 row(s) affected	0.000 sec

PASO 9:

```
343 •  select * from departamentos;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap | Result Grid

cod_dep	nom_dep
d001	Comercio
d002	Finanzas
d003	Recursos Humanos
d004	Producción
d005	Desarrollo

departamentos 18 × | Apply | Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	17:04:11	rollback	0 row(s) affected	0.000 sec
2	17:05:27	select * from departamentos LIMIT 0, 1...	9 row(s) returned	0.000 sec / 0.000 sec

No se ha hecho rollback del paso 5 porque en el ejercicio 7 hay sentencias ‘Alter’, las cuales tienen el commit implícito.

PASO 10-12:

```
345 •  set autocommit=on; start transaction;
346 •  update departamentos set cod_dep = substr(nom_dep, 1, 4);
347 •  rollback;
```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
3	17:19:52	set autocommit=on	0 row(s) affected	0.000 sec
4	17:19:52	start transaction	0 row(s) affected	0.000 sec
5	17:21:31	update departamentos set cod_dep =...	9 row(s) affected Rows matched: 9 ...	0.031 sec
6	17:22:08	rollback	0 row(s) affected	0.016 sec

PASO 13:

cod_dep	nom_dep
d001	Comercio
d002	Finanzas
d003	Recursos Humanos
d004	Producción
d005	Desarrollo
d006	Control de Calidad
d007	Ventas
d008	Investigación
d009	Atención al Cliente
NULL	NULL

Result Grid
Form Editor
Field Types

departamentos 19 ×
Apply
Revert

Output
Action Output

#	Time	Action	Message	Duration / Fetch
1	17:33:41	select * from departamentos LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec

No ha cambiado nada, porque el rollback ha deshecho las sentencias update del paso 11.

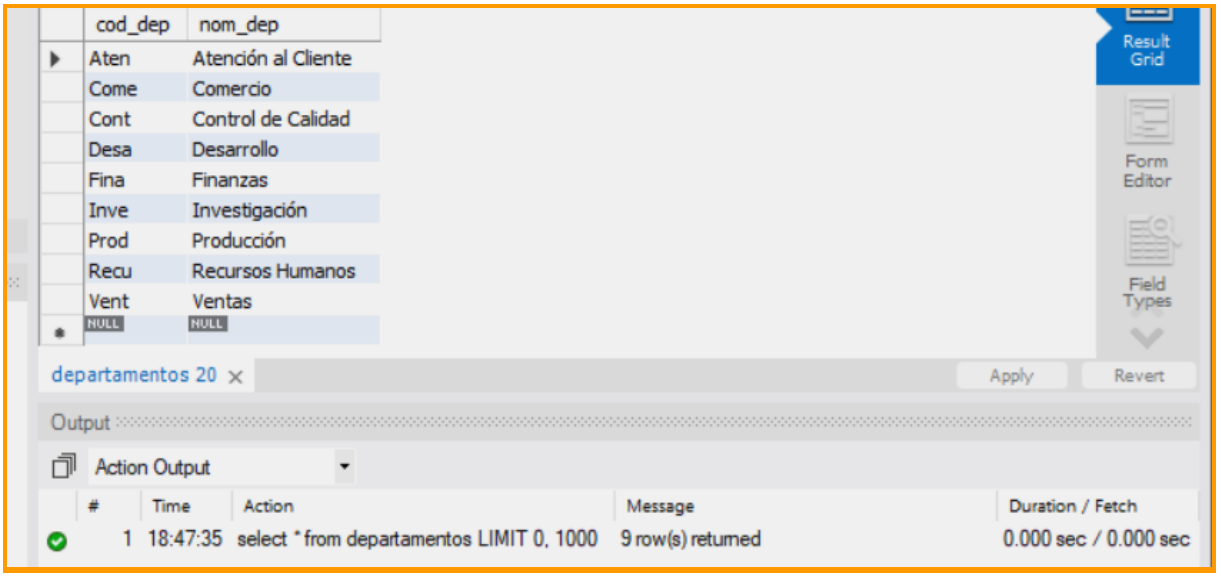
PASO 14-16:

```
352 •  set autocommit=on; start transaction;   #14-16
353 •  update departamentos set cod_dep = substr(nom_dep, 1, 4);
354 •  commit;
```

Output
Action Output

#	Time	Action	Message	Duration / Fetch
1	18:38:20	set autocommit=on	0 row(s) affected	0.000 sec
2	18:38:20	start transaction	0 row(s) affected	0.000 sec
3	18:38:20	update departamentos set cod_dep = subs...	9 row(s) affected Rows matched: 9 Chang...	0.000 sec
4	18:38:20	commit	0 row(s) affected	0.000 sec

PASO 17:



Como en el apartado 16 hicimos commit, confirmamos el 15.
El apartado 15 , con la función subtract ,corta la cadena de caracteres de nom_dep desde la posición 1 a la 4, ambas incluidas, y luego se la asigna a cod_dep. Así, el cod_dep será las 4 primeras letras de nom_dep.