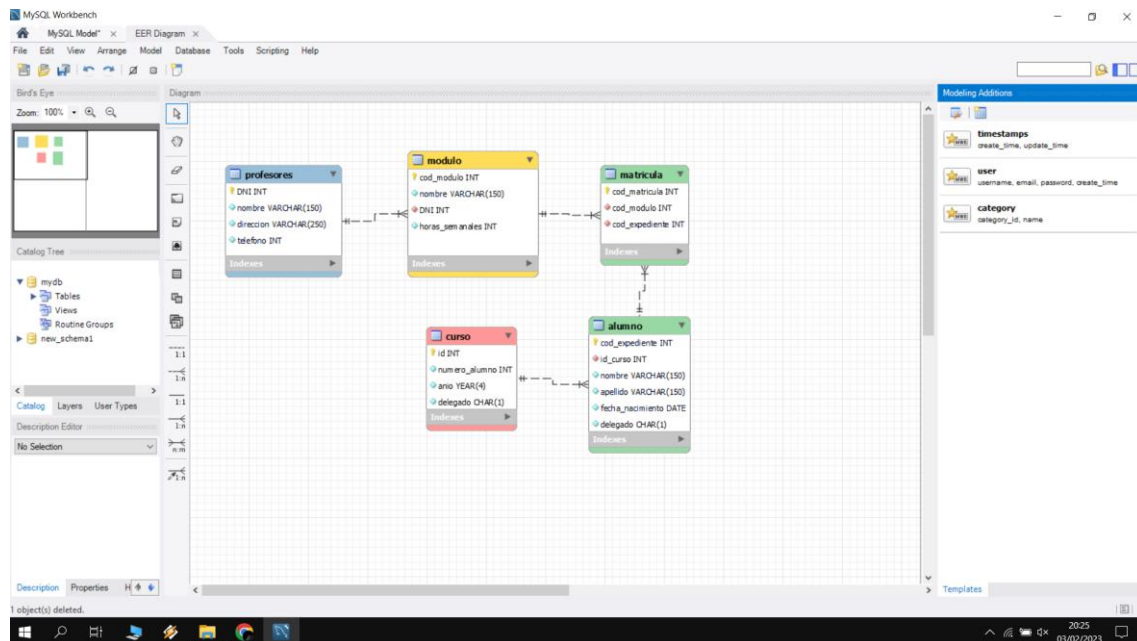


# Ejercicio 2.1

## Ejercicio1



-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE,  
SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIV  
ISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

-- Schema mydb

-- Schema mydb

CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 ;

USE `mydb` ;

-- Table `mydb`.`profesor`

```
CREATE TABLE IF NOT EXISTS `mydb`.`profesor` (  
  `DNI` INT NOT NULL,  
  `nombre` VARCHAR(45) NULL,  
  `direccion` VARCHAR(45) NULL,  
  `telefono` VARCHAR(9) NULL,  
  PRIMARY KEY (`DNI`))  
ENGINE = InnoDB;
```

```
-- Table `mydb`.`modulo`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`modulo` (  
  `cod_modulo` INT NOT NULL,  
  `nombre` VARCHAR(45) NOT NULL,  
  `DNI` INT NOT NULL,  
  `horas_semanales` INT NOT NULL,  
  PRIMARY KEY (`cod_modulo`),  
  INDEX `dni_idx` (`DNI` ASC) VISIBLE,  
  CONSTRAINT `dni`  
    FOREIGN KEY (`DNI`)  
    REFERENCES `mydb`.`profesor` (`DNI`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
-- Table `mydb`.`alumno`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`alumno` (  
  `n_expediente` INT NOT NULL,  
  `nombre` VARCHAR(45) NOT NULL,  
  `apellidos` VARCHAR(45) NOT NULL,  
  `fecha_nacimiento` DATE NOT NULL,
```

```
`telefono_contacto` INT NULL,  
PRIMARY KEY (`n_expediente`))  
ENGINE = InnoDB;
```

```
-- Table `mydb`.`matricula`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`matricula` (  
  `cod_matricula` INT NOT NULL,  
  `cod_modulo` INT NOT NULL,  
  `n_expediente` INT NOT NULL,  
  PRIMARY KEY (`cod_matricula`),  
  INDEX `n_exped_idx` (`n_expediente` ASC) VISIBLE,  
  INDEX `cod_modu_idx` (`cod_modulo` ASC) VISIBLE,  
  CONSTRAINT `n_exped`  
    FOREIGN KEY (`n_expediente`)  
      REFERENCES `mydb`.`alumno` (`n_expediente`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION,  
  CONSTRAINT `cod_modu`  
    FOREIGN KEY (`cod_modulo`)  
      REFERENCES `mydb`.`modulo` (`cod_modulo`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
-- Table `mydb`.`curso`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`curso` (  
  `id` INT NOT NULL,  
  `n_estudiantes` INT NOT NULL,  
  `n_expediente` INT NOT NULL,
```

```

PRIMARY KEY (`id`),

INDEX `n_expe_idx` (`n_expediente` ASC) VISIBLE,

CONSTRAINT `n_expe`

FOREIGN KEY (`n_expediente`)

REFERENCES `mydb`.`alumno` (`n_expediente`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

```

```

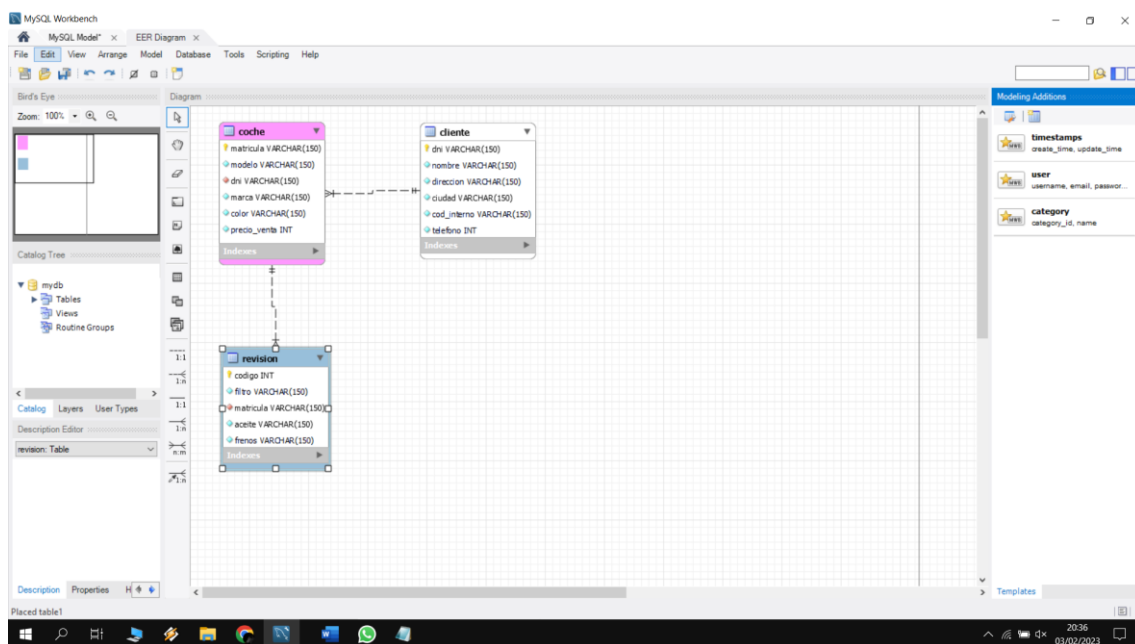
SET SQL_MODE=@OLD_SQL_MODE;

SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;

SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;

```

## Ejercicio 2



-- MySQL Workbench Forward Engineering

```

SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;

SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;

SET @OLD_SQL_MODE=@@SQL_MODE,
SQL_MODE='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIV
ISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';

```

```
-----  
-- Schema mydb  
-----
```

```
-----  
-- Schema mydb  
-----
```

```
CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 ;  
USE `mydb` ;
```

```
-----  
-- Table `mydb`.`cliente`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`cliente` (  
  `dni` VARCHAR(150) NOT NULL,  
  `nombre` VARCHAR(150) NOT NULL,  
  `direccion` VARCHAR(150) NOT NULL,  
  `ciudad` VARCHAR(150) NOT NULL,  
  `cod_interno` VARCHAR(150) NOT NULL,  
  `telefono` INT NOT NULL,  
  PRIMARY KEY (`dni`))  
ENGINE = InnoDB;
```

```
-----  
-- Table `mydb`.`coche`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`coche` (  
  `matricula` VARCHAR(150) NOT NULL,  
  `modelo` VARCHAR(150) NOT NULL,  
  `dni` VARCHAR(150) NOT NULL,  
  `marca` VARCHAR(150) NOT NULL,  
  `color` VARCHAR(150) NOT NULL,  
  `precio_venta` INT NOT NULL,  
  PRIMARY KEY (`matricula`),
```

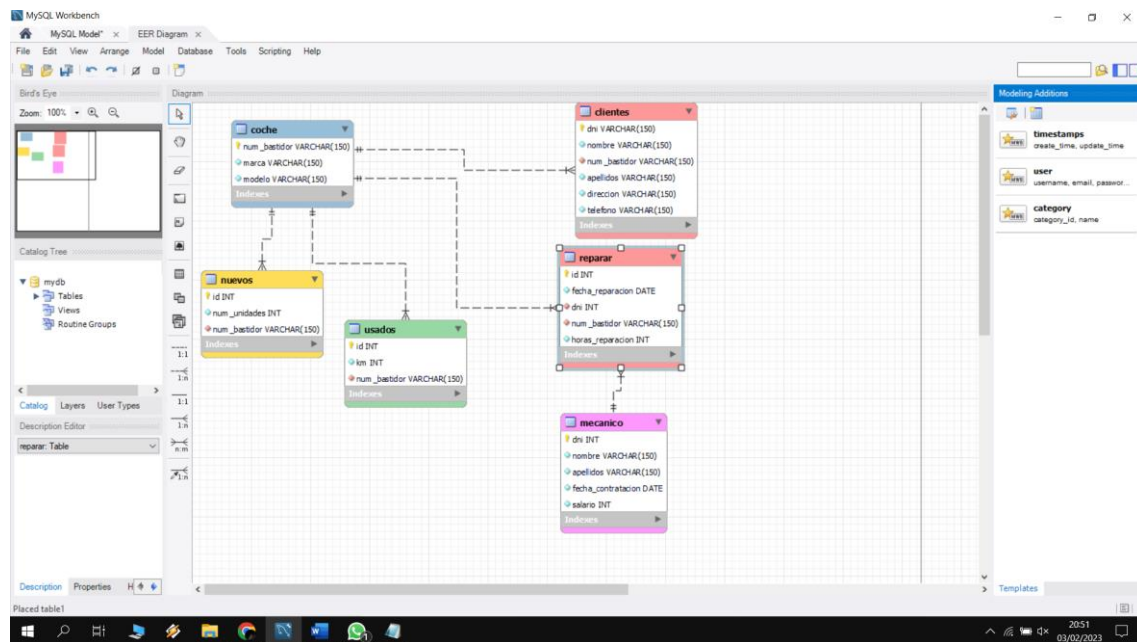
```
INDEX `dni_idx` (`dni` ASC) VISIBLE,  
CONSTRAINT `dni`  
FOREIGN KEY (`dni`)  
REFERENCES `mydb`.`cliente` (`dni`)  
ON DELETE NO ACTION  
ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
-----  
-- Table `mydb`.`revision`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`revision` (  
  `codigo` INT NOT NULL,  
  `filtro` VARCHAR(150) NOT NULL,  
  `matricula` VARCHAR(150) NOT NULL,  
  `aceite` VARCHAR(150) NOT NULL,  
  `frenos` VARCHAR(150) NOT NULL,  
  PRIMARY KEY (`codigo`),  
  INDEX `matricula_idx` (`matricula` ASC) VISIBLE,  
  CONSTRAINT `matricula`  
  FOREIGN KEY (`matricula`)  
  REFERENCES `mydb`.`coche` (`matricula`)  
  ON DELETE NO ACTION  
  ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
SET SQL_MODE=@OLD_SQL_MODE;  
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;  
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

### Ejercicio 3



-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE,  
SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_D  
IVISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

-- Schema mydb

-- Schema mydb

CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 ;

USE `mydb` ;

-- Table `mydb`.`coche`

CREATE TABLE IF NOT EXISTS `mydb`.`coche` (  
`num\_bastidor` VARCHAR(150) NOT NULL,

```
`marca` VARCHAR(150) NOT NULL,  
`modelo` VARCHAR(150) NOT NULL,  
PRIMARY KEY (`num_bastidor`))  
ENGINE = InnoDB;
```

```
-- Table `mydb`.`nuevos`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`nuevos` (  
  `id` INT NOT NULL,  
  `num_unidades` INT NOT NULL,  
  `num_bastidor` VARCHAR(150) NOT NULL,  
  PRIMARY KEY (`id`),  
  INDEX `bastidor_coche_idx` (`num_bastidor` ASC) VISIBLE,  
  CONSTRAINT `bastidor_coche`  
    FOREIGN KEY (`num_bastidor`)  
      REFERENCES `mydb`.`coche` (`num_bastidor`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
-- Table `mydb`.`usados`  
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`usados` (  
  `id` INT NOT NULL,  
  `km` INT NOT NULL,  
  `num_bastidor` VARCHAR(150) NOT NULL,  
  PRIMARY KEY (`id`),  
  INDEX `coche_idx` (`num_bastidor` ASC) VISIBLE,  
  CONSTRAINT `coche`  
    FOREIGN KEY (`num_bastidor`)  
      REFERENCES `mydb`.`coche` (`num_bastidor`)
```



ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-----  
-- Table `mydb`.`mecanico`  
-----

```
CREATE TABLE IF NOT EXISTS `mydb`.`mecanico` (  
  `dni` INT NOT NULL,  
  `nombre` VARCHAR(150) NOT NULL,  
  `apellidos` VARCHAR(150) NOT NULL,  
  `fecha_contratacion` DATE NOT NULL,  
  `salario` INT NOT NULL,  
  PRIMARY KEY (`dni`))  
ENGINE = InnoDB;
```

-----  
-- Table `mydb`.`reparar`  
-----

```
CREATE TABLE IF NOT EXISTS `mydb`.`reparar` (  
  `id` INT NOT NULL,  
  `fecha_reparacion` DATE NOT NULL,  
  `dni` INT NOT NULL,  
  `num_bastidor` VARCHAR(150) NOT NULL,  
  `horas_reparacion` INT NOT NULL,  
  PRIMARY KEY (`id`),  
  INDEX `coche_idx` (`num_bastidor` ASC) VISIBLE,  
  INDEX `mecanico_idx` (`dni` ASC) VISIBLE,  
  CONSTRAINT `coche`  
    FOREIGN KEY (`num_bastidor`)  
    REFERENCES `mydb`.`coche` (`num_bastidor`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION,
```

```

CONSTRAINT `mecanico`

FOREIGN KEY (`dni`)

REFERENCES `mydb`.`mecanico` (`dni`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-----

-- Table `mydb`.`clientes`
-----

CREATE TABLE IF NOT EXISTS `mydb`.`clientes` (

`dni` VARCHAR(150) NOT NULL,

`nombre` VARCHAR(150) NOT NULL,

`num_bastidor` VARCHAR(150) NOT NULL,

`apellidos` VARCHAR(150) NOT NULL,

`direccion` VARCHAR(150) NOT NULL,

`telefono` VARCHAR(150) NOT NULL,

PRIMARY KEY (`dni`),

INDEX `coche_idx` (`num_bastidor` ASC) VISIBLE,

CONSTRAINT `coche`

FOREIGN KEY (`num_bastidor`)

REFERENCES `mydb`.`coche` (`num_bastidor`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

SET SQL_MODE=@OLD_SQL_MODE;

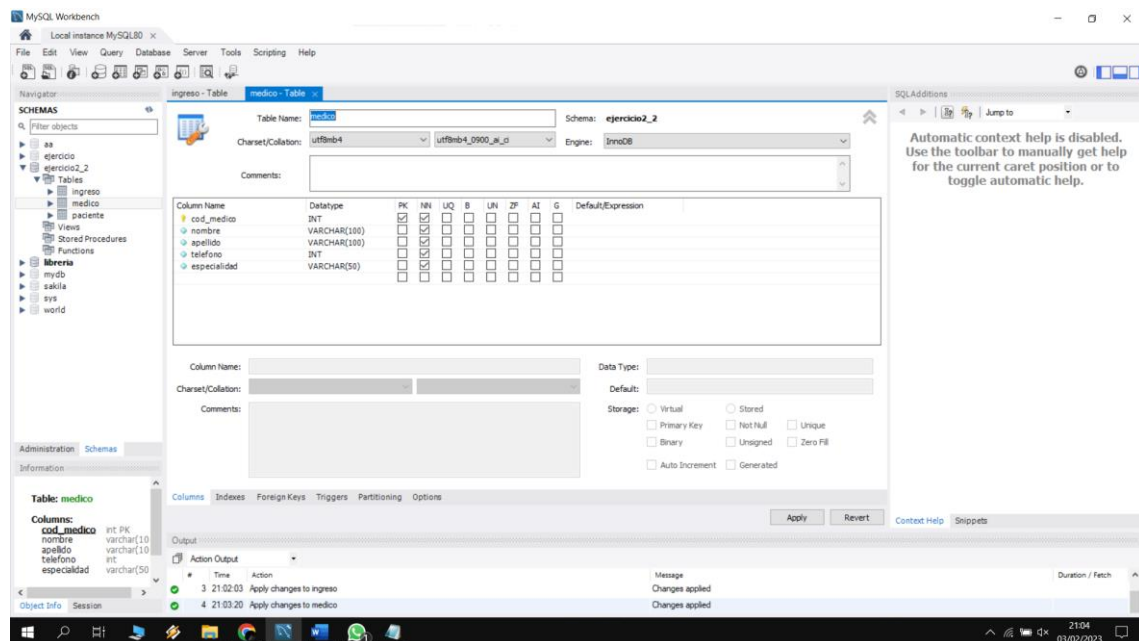
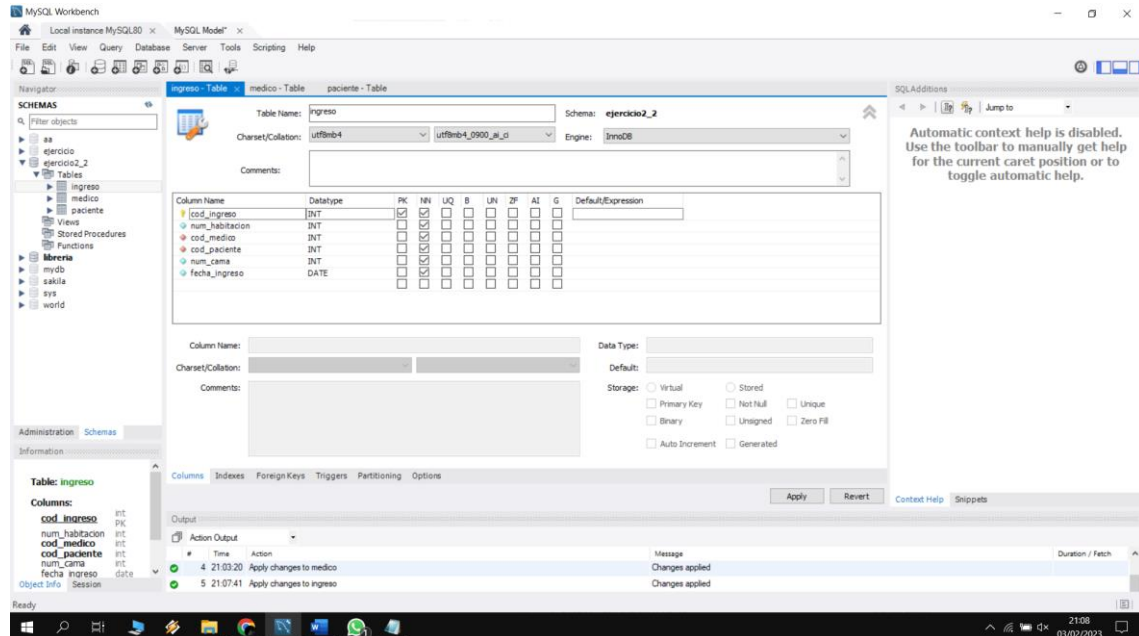
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;

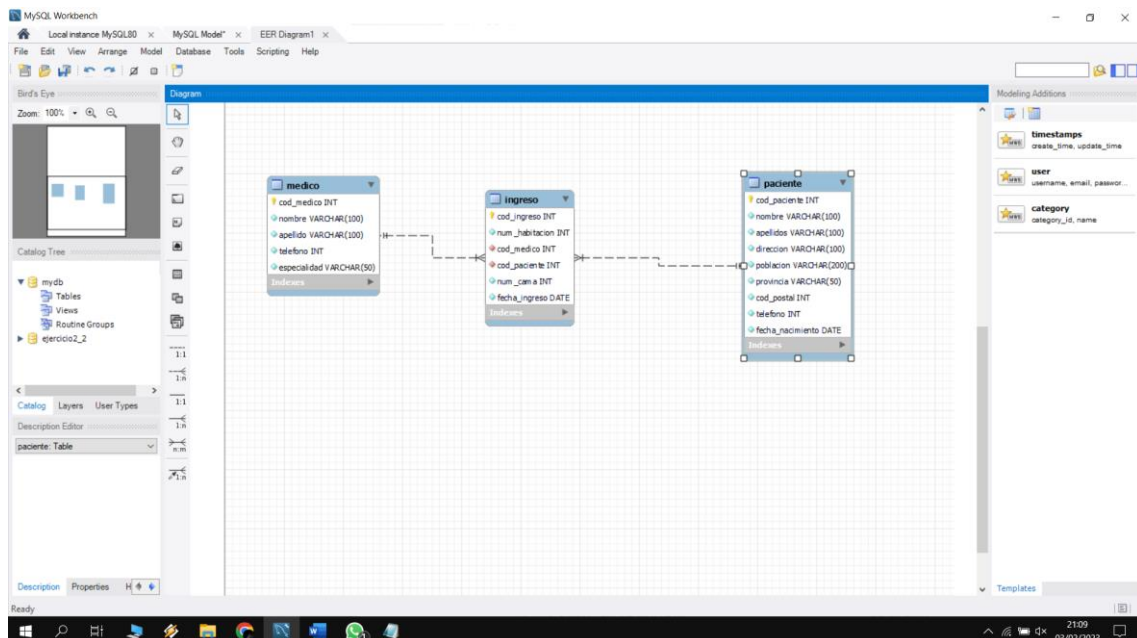
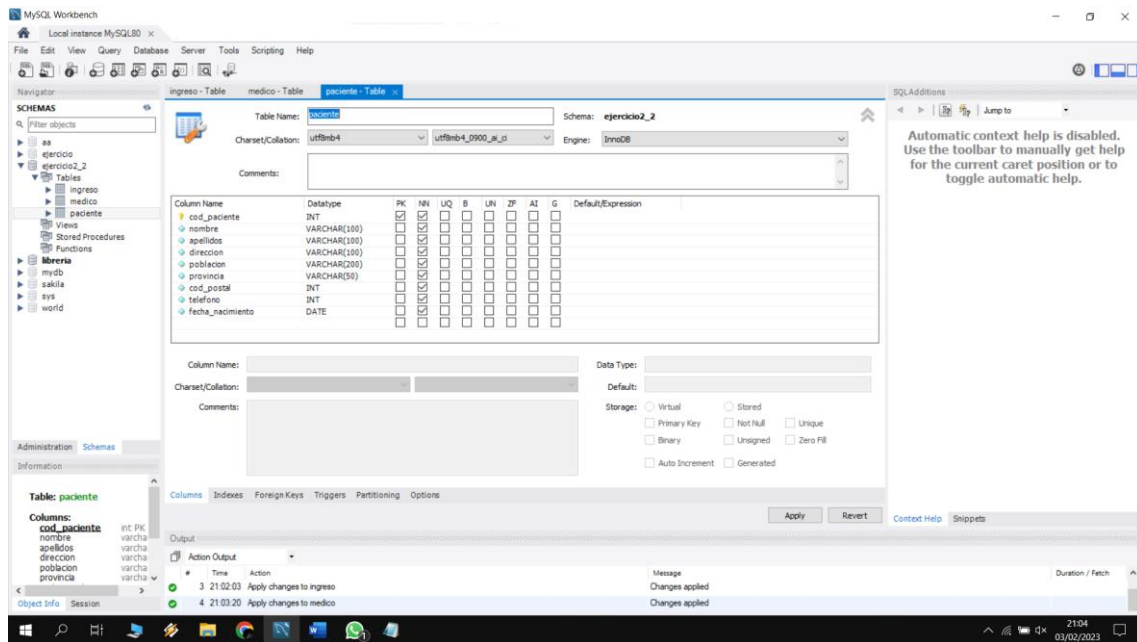
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;

```

# Ejercicio 2.2

## Ejercicio4





-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE,  
SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIV  
ISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

-- Schema mydb

```
-- Schema ejercicio2_2
```

```
-- Schema ejercicio2_2
```

```
CREATE SCHEMA IF NOT EXISTS `ejercicio2_2` DEFAULT CHARACTER SET utf8mb4 COLLATE utf8mb4_0900_ai_ci ;  
USE `ejercicio2_2` ;
```

```
-- Table `ejercicio2_2`.`medico`
```

```
CREATE TABLE IF NOT EXISTS `ejercicio2_2`.`medico` (  
  `cod_medico` INT NOT NULL,  
  `nombre` VARCHAR(100) NOT NULL,  
  `apellido` VARCHAR(100) NOT NULL,  
  `telefono` INT NOT NULL,  
  `especialidad` VARCHAR(50) NOT NULL,  
  PRIMARY KEY (`cod_medico`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8mb4  
COLLATE = utf8mb4_0900_ai_ci;
```

```
-- Table `ejercicio2_2`.`paciente`
```

```
CREATE TABLE IF NOT EXISTS `ejercicio2_2`.`paciente` (  
  `cod_paciente` INT NOT NULL,  
  `nombre` VARCHAR(100) NOT NULL,  
  `apellidos` VARCHAR(100) NOT NULL,  
  `direccion` VARCHAR(100) NOT NULL,  
  `poblacion` VARCHAR(200) NOT NULL,  
  `provincia` VARCHAR(50) NOT NULL,
```

```
`cod_postal` INT NOT NULL,  
`telefono` INT NOT NULL,  
`fecha_nacimiento` DATE NOT NULL,  
PRIMARY KEY (`cod_paciente`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8mb4  
COLLATE = utf8mb4_0900_ai_ci;
```

```
-- Table `ejercicio2_2`.`ingreso`  
-----
```

```
CREATE TABLE IF NOT EXISTS `ejercicio2_2`.`ingreso` (  
  `cod_ingreso` INT NOT NULL,  
  `num_habitacion` INT NOT NULL,  
  `cod_medico` INT NOT NULL,  
  `cod_paciente` INT NOT NULL,  
  `num_cama` INT NOT NULL,  
  `fecha_ingreso` DATE NOT NULL,  
  PRIMARY KEY (`cod_ingreso`),  
  INDEX `paciente_idx` (`cod_paciente` ASC) VISIBLE,  
  INDEX `medico_idx` (`cod_medico` ASC) VISIBLE,  
  CONSTRAINT `medico`  
    FOREIGN KEY (`cod_medico`)  
      REFERENCES `ejercicio2_2`.`medico` (`cod_medico`),  
  CONSTRAINT `paciente`  
    FOREIGN KEY (`cod_paciente`)  
      REFERENCES `ejercicio2_2`.`paciente` (`cod_paciente`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8mb4  
COLLATE = utf8mb4_0900_ai_ci;
```

```
SET SQL_MODE=@OLD_SQL_MODE;  
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
```

SET UNIQUE\_CHECKS=@OLD\_UNIQUE\_CHECKS;

## Ejercicio5

The screenshot shows the MySQL Workbench interface. The 'Schemas' pane on the left lists the database structure. The main window displays the 'cliente' table structure for the 'ejercicio2\_25' schema. The table has the following columns:

Column Name	Datatype	PK	NN	UN	B	UN	2F	AI	G	Default/Expression
dni	VARCHAR(100)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
nombre	VARCHAR(150)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
apellidos	VARCHAR(150)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
direccion	VARCHAR(150)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
fecha_nacimiento	DATE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

The 'Output' pane at the bottom shows the following actions:

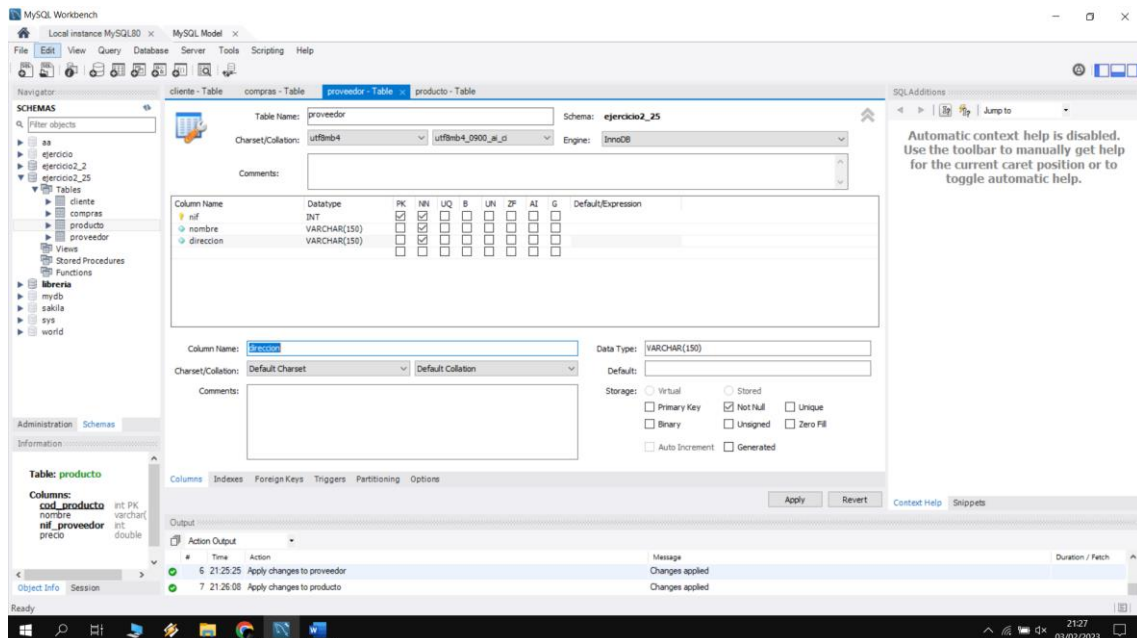
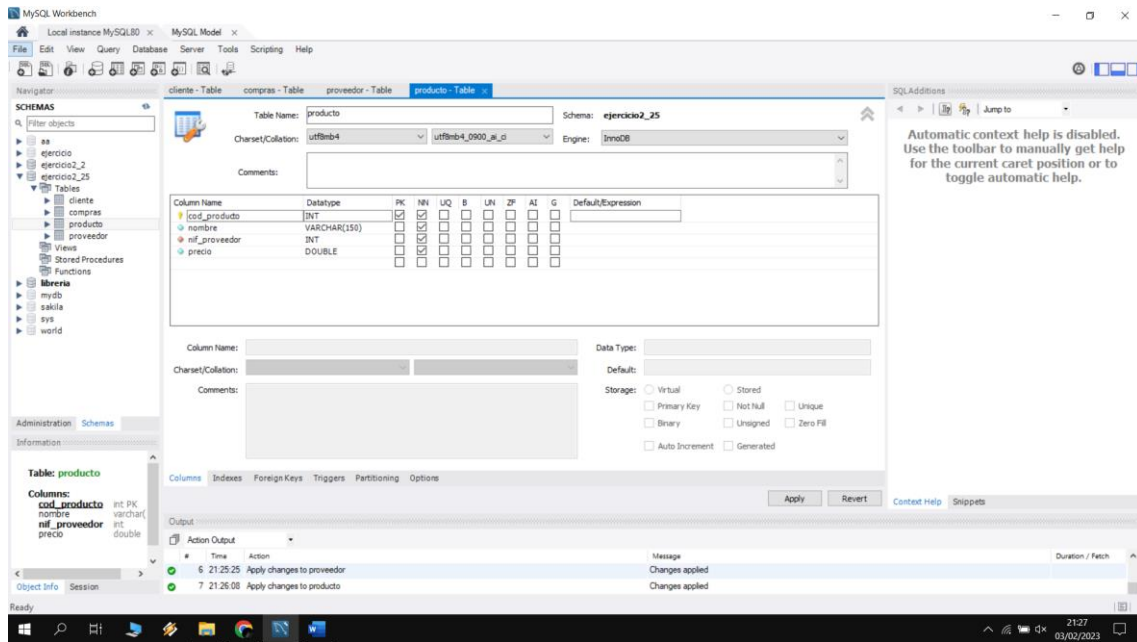
#	Time	Action	Message	Duration / Fetch
1	21:13:48	Apply changes to ejercicio2_25	Changes applied	
2	21:16:22	Apply changes to cliente	Changes applied	

The screenshot shows the MySQL Workbench interface. The 'Schemas' pane on the left lists the database structure. The main window displays the 'compras' table structure for the 'ejercicio2\_25' schema. The table has the following columns:

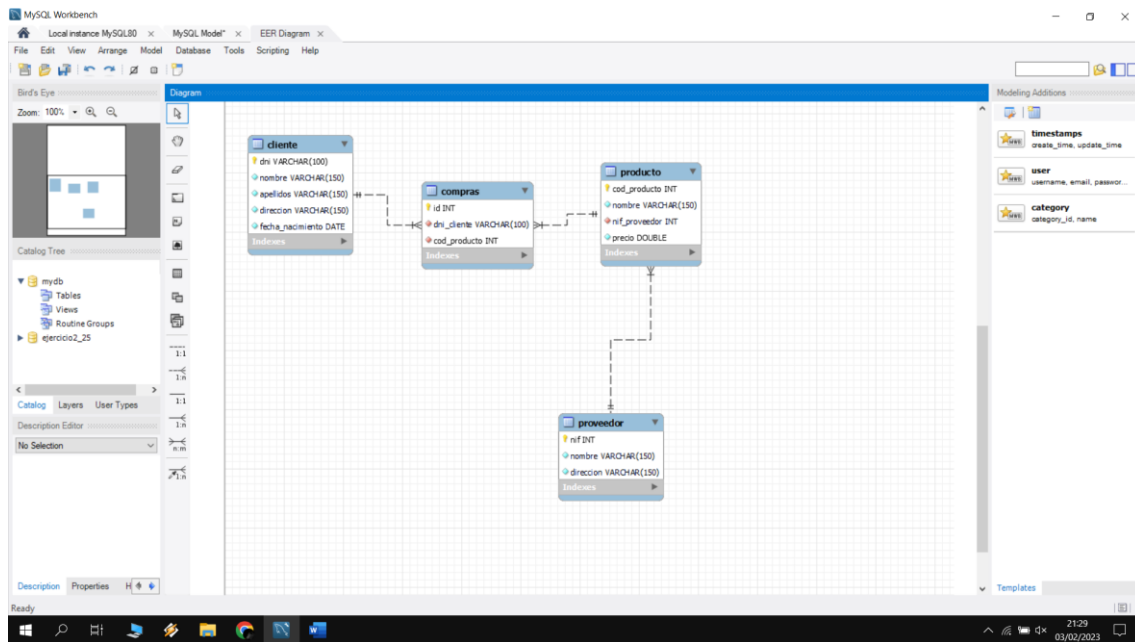
Column Name	Datatype	PK	NN	UN	B	UN	2F	AI	G	Default/Expression
id	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
dni_cliente	VARCHAR(100)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
cod_producto	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

The 'Output' pane at the bottom shows the following actions:

#	Time	Action	Message	Duration / Fetch
4	21:22:25	Apply changes to producto	Changes applied	
5	21:22:43	Apply changes to compras	Changes applied	







-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE,  
SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

-- Schema mydb

-- Schema ejercicio2\_25

-- Schema ejercicio2\_25

CREATE SCHEMA IF NOT EXISTS `ejercicio2\_25` DEFAULT CHARACTER SET utf8mb4 COLLATE utf8mb4\_0900\_ai\_ci ;  
USE `ejercicio2\_25` ;

-- Table `ejercicio2\_25`.`cliente`

```
CREATE TABLE IF NOT EXISTS `ejercicio2_25`.`cliente` (  
  `dni` VARCHAR(100) NOT NULL,  
  `nombre` VARCHAR(150) NOT NULL,  
  `apellidos` VARCHAR(150) NOT NULL,  
  `direccion` VARCHAR(150) NOT NULL,  
  `fecha_nacimiento` DATE NOT NULL,  
  PRIMARY KEY (`dni`))  
  
ENGINE = InnoDB  
  
DEFAULT CHARACTER SET = utf8mb4  
  
COLLATE = utf8mb4_0900_ai_ci;
```

-----

```
-- Table `ejercicio2_25`.`proveedor`
```

-----

```
CREATE TABLE IF NOT EXISTS `ejercicio2_25`.`proveedor` (  
  `nif` INT NOT NULL,  
  `nombre` VARCHAR(150) NOT NULL,  
  `direccion` VARCHAR(150) NOT NULL,  
  PRIMARY KEY (`nif`))  
  
ENGINE = InnoDB  
  
DEFAULT CHARACTER SET = utf8mb4  
  
COLLATE = utf8mb4_0900_ai_ci;
```

-----

```
-- Table `ejercicio2_25`.`producto`
```

-----

```
CREATE TABLE IF NOT EXISTS `ejercicio2_25`.`producto` (  
  `cod_producto` INT NOT NULL,  
  `nombre` VARCHAR(150) NOT NULL,  
  `nif_proveedor` INT NOT NULL,  
  `precio` DOUBLE NOT NULL,  
  PRIMARY KEY (`cod_producto`),  
  INDEX `proveedor_idx` (`nif_proveedor` ASC) VISIBLE,
```

```

CONSTRAINT `proveedor`
  FOREIGN KEY (`nif_proveedor`)
  REFERENCES `ejercicio2_25`.`proveedor` (`nif`))
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8mb4
COLLATE = utf8mb4_0900_ai_ci;

```

```

-----
-- Table `ejercicio2_25`.`compras`
-----

```

```

CREATE TABLE IF NOT EXISTS `ejercicio2_25`.`compras` (
  `id` INT NOT NULL,
  `dni_cliente` VARCHAR(100) NOT NULL,
  `cod_producto` INT NOT NULL,
  PRIMARY KEY (`id`),
  INDEX `cliente_idx` (`dni_cliente` ASC) VISIBLE,
  INDEX `producto_idx` (`cod_producto` ASC) VISIBLE,
  CONSTRAINT `cliente`
    FOREIGN KEY (`dni_cliente`)
    REFERENCES `ejercicio2_25`.`cliente` (`dni`),
  CONSTRAINT `producto`
    FOREIGN KEY (`cod_producto`)
    REFERENCES `ejercicio2_25`.`producto` (`cod_producto`))
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8mb4
COLLATE = utf8mb4_0900_ai_ci;

```

```

SET SQL_MODE=@OLD_SQL_MODE;
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;

```

## Ejercicio6

The screenshot shows the MySQL Workbench interface. The 'Schemas' pane on the left lists the 'ejercicio2\_26' schema. The main window displays the 'proveedor' table structure. The table has the following columns:

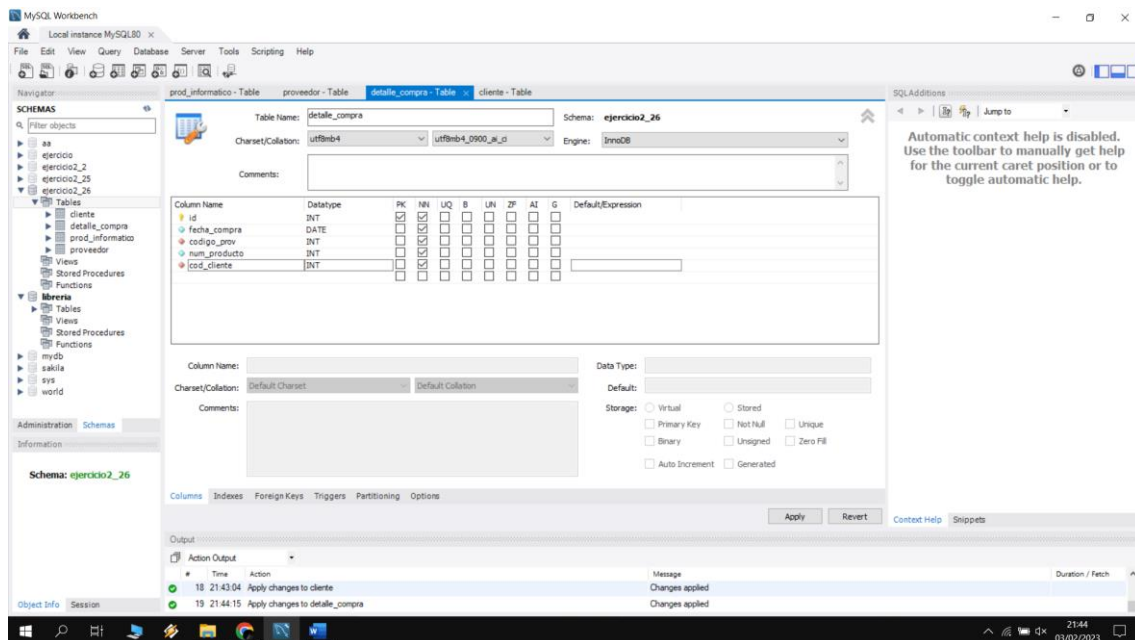
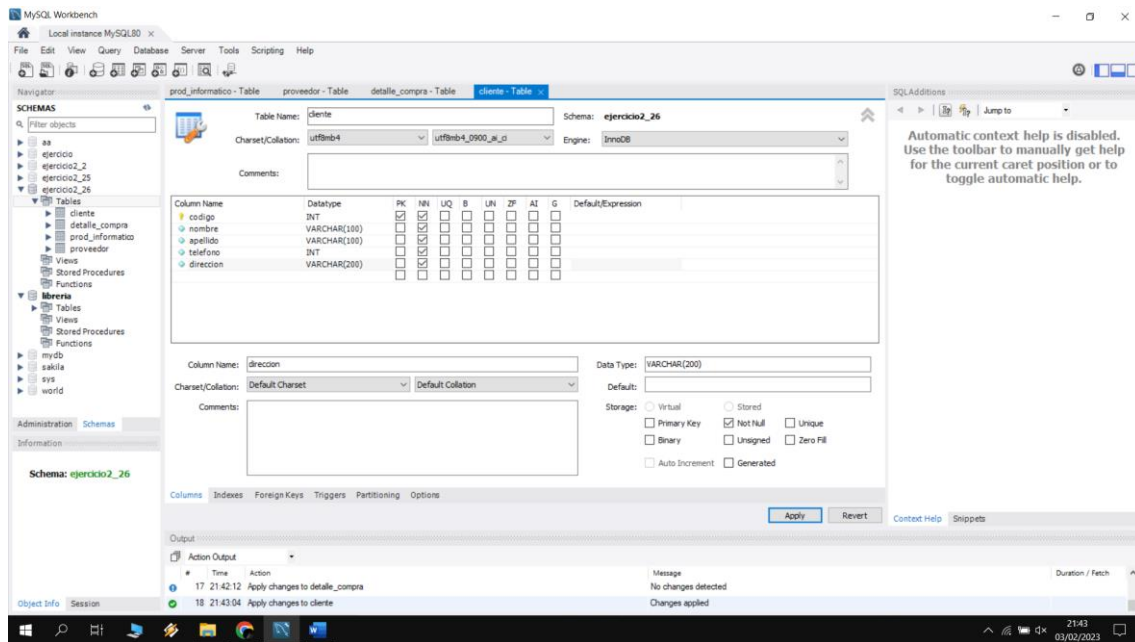
Column Name	Datatype	PK	NN	UN	B	UN	ZF	AI	G	Default/Expression
codigo_prov	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
nombre	VARCHAR(100)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
apellidos	VARCHAR(100)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
provincia	VARCHAR(100)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
direccion	VARCHAR(150)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
telefono	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

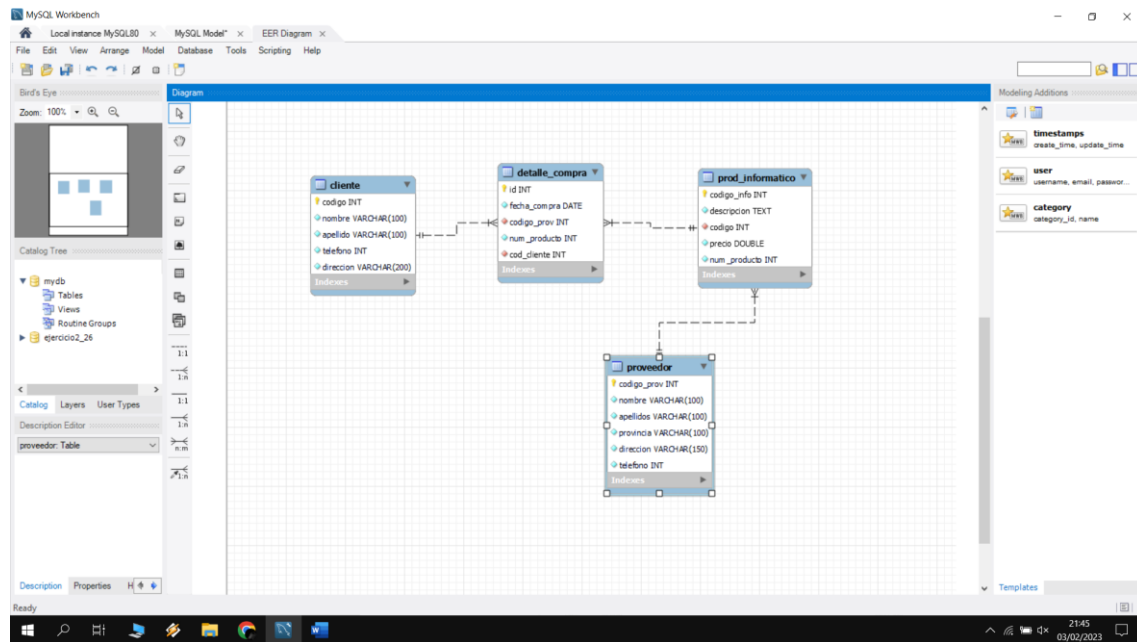
The 'Columns' tab is selected at the bottom. The 'Output' pane shows two messages: 'Apply changes to proveedor' and 'Changes applied'.

The screenshot shows the MySQL Workbench interface. The 'Schemas' pane on the left lists the 'ejercicio2\_26' schema. The main window displays the 'prod\_informatico' table structure. The table has the following columns:

Column Name	Datatype	PK	NN	UN	B	UN	ZF	AI	G	Default/Expression
codigo_info	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
descripcion	TEXT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
precio	DOUBLE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
num_producto	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

The 'Columns' tab is selected at the bottom. The 'Output' pane shows two messages: 'Apply changes to proveedor' and 'Changes applied'.





-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE,  
SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

-- Schema mydb

-- Schema ejercicio2\_26

-- Schema ejercicio2\_26

CREATE SCHEMA IF NOT EXISTS `ejercicio2\_26` DEFAULT CHARACTER SET utf8mb4 COLLATE utf8mb4\_0900\_ai\_ci ;  
USE `ejercicio2\_26` ;

-- Table `ejercicio2\_26`.`cliente`

```
CREATE TABLE IF NOT EXISTS `ejercicio2_26`.`cliente` (  
  `codigo` INT NOT NULL,  
  `nombre` VARCHAR(100) NOT NULL,  
  `apellido` VARCHAR(100) NOT NULL,  
  `telefono` INT NOT NULL,  
  `direccion` VARCHAR(200) NOT NULL,  
  PRIMARY KEY (`codigo`))  
  
ENGINE = InnoDB  
  
DEFAULT CHARACTER SET = utf8mb4  
  
COLLATE = utf8mb4_0900_ai_ci;
```

-----

-- Table `ejercicio2\_26`.`proveedor`

-----

```
CREATE TABLE IF NOT EXISTS `ejercicio2_26`.`proveedor` (  
  `codigo_prov` INT NOT NULL,  
  `nombre` VARCHAR(100) NOT NULL,  
  `apellidos` VARCHAR(100) NOT NULL,  
  `provincia` VARCHAR(100) NOT NULL,  
  `direccion` VARCHAR(150) NOT NULL,  
  `telefono` INT NOT NULL,  
  PRIMARY KEY (`codigo_prov`))  
  
ENGINE = InnoDB  
  
DEFAULT CHARACTER SET = utf8mb4  
  
COLLATE = utf8mb4_0900_ai_ci;
```

-----

-- Table `ejercicio2\_26`.`prod\_informatico`

-----

```
CREATE TABLE IF NOT EXISTS `ejercicio2_26`.`prod_informatico` (  
  `codigo_info` INT NOT NULL,  
  `descripcion` TEXT NOT NULL,  
  `codigo` INT NOT NULL,
```

```

`precio` DOUBLE NOT NULL,
`num_producto` INT NOT NULL,
PRIMARY KEY (`codigo_info`),
INDEX `proveedor_idx` (`codigo` ASC) VISIBLE,
CONSTRAINT `proveedor`
    FOREIGN KEY (`codigo`)
        REFERENCES `ejercicio2_26`.`proveedor` (`codigo_prov`))
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8mb4
COLLATE = utf8mb4_0900_ai_ci;

```

```

-----
-- Table `ejercicio2_26`.`detalle_compra`
-----

CREATE TABLE IF NOT EXISTS `ejercicio2_26`.`detalle_compra` (
    `id` INT NOT NULL,
    `fecha_compra` DATE NOT NULL,
    `codigo_prov` INT NOT NULL,
    `num_producto` INT NOT NULL,
    `cod_cliente` INT NOT NULL,
    PRIMARY KEY (`id`),
    INDEX `producto_idx` (`codigo_prov` ASC) VISIBLE,
    INDEX `cliente_idx` (`cod_cliente` ASC) VISIBLE,
    CONSTRAINT `cliente`
        FOREIGN KEY (`cod_cliente`)
            REFERENCES `ejercicio2_26`.`cliente` (`codigo`),
    CONSTRAINT `producto`
        FOREIGN KEY (`codigo_prov`)
            REFERENCES `ejercicio2_26`.`prod_informatico` (`codigo_info`))
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8mb4
COLLATE = utf8mb4_0900_ai_ci;

```



```
SET SQL_MODE=@OLD_SQL_MODE;  
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;  
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

### EJERCICIO 2.3.