1. ARMADO DE BASE DE DATOS Y TABLAS

CREATE DATABASE desafio\_base\_de\_datos;

USE `desafio\_base\_de\_datos`;

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) `desafio\_base\_de\_datos`.`departamentos` (`id` INT(11) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) NULL , `nombre` VARCHAR(50) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) NULL , `presupuesto` INT(11) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) NULL ) ENGINE = InnoDB;

USE `desafio\_base\_de\_datos`;

[ALTER](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) `departamentos` ADD PRIMARY KEY(`id`);

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) `desafio\_base\_de\_datos`.`empleados` (`dni` INT(11) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) NULL , `nombre` VARCHAR(50) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) NULL , `apellido` VARCHAR(50) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) NULL , `departamento\_id` INT(11) [NOT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_not) NULL ) ENGINE = InnoDB;

[ALTER](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) `empleados` ADD PRIMARY KEY(`dni`);

[ALTER](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) `empleados` ADD FOREIGN KEY (`departamento\_id`) REFERENCES departamentos(id);

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `departamentos` (`id`, `nombre`, `presupuesto`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('14', 'Informática', '80000'), ('77', 'Investigación', '40000'), ('15', 'Gestión', '95000'), ('37', 'Desarrollo', '65000'), ('16', 'Comunicación', '75000');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('31096678', 'Juan', 'López', '14');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('31096675', 'Martín', 'Zarabia', '77');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('34269854', 'José', 'Vélez', '77');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('41369852', 'Paula', 'Madariaga', '77');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('33698521', 'Pedro', 'Pérez', '14');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('32698547', 'Mariana', 'López', '15');

INSERT INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) VALUES ('42369854', 'Abril', 'Sánchez', '37');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('36125896', 'Marti', 'Julia', '14');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('36985471', 'Omar', 'Diaz', '15');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('32145698', 'Guadalupe', 'Pérez', '77');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('32369854', 'Bernardo', 'Pantera', '37');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('36125965', 'Lucia', 'Pesaro', '14');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('31236985', 'María', 'Diamante', '14');

1. CONSULTAS

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) `apellido` FROM `empleados` ORDER BY apellido ASC;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) DISTINCT `apellido` FROM `empleados`;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM `empleados` WHERE `apellido`='López';

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM `empleados` WHERE `apellido`[IN](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23function_in) ('López','Pérez');

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM `empleados` WHERE `departamento\_id` [IN](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23function_in) (14);

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM `empleados` WHERE `departamento\_id` [IN](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23function_in) (37,77);

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM `empleados` WHERE `apellido` [LIKE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-comparison-functions.html%23operator_like) 'P%';

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [SUM](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_sum)(`presupuesto`) FROM `departamentos`;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.\*, d.nombre, d.presupuesto FROM `empleados` e, `departamentos` d WHERE e.departamento\_id = d.id;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.nombre as Nombre\_Empleado, e.apellido as Apellido\_Empleado, d.nombre as Nombre\_Departamento, d.presupuesto as Presupuesto FROM `empleados` e INNER JOIN `departamentos`d ON e.departamento\_id = d.id;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.nombre as Nombre\_Empleado, e.apellido as Apellido\_Empleado FROM `empleados` e INNER JOIN `departamentos`d ON e.departamento\_id = d.id WHERE d.presupuesto > 60000;

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `departamentos` (`id`, `nombre`, `presupuesto`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('11', 'Calidad', '40000');

[INSERT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) INTO `empleados` (`dni`, `nombre`, `apellido`, `departamento\_id`) [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ('89267109','Esther','Vázquez', '11');

[UPDATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/update.html) `departamentos` [SET](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/set.html) `presupuesto` = presupuesto \* 0.9;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) d.id, d.nombre, d.presupuesto FROM `departamentos`d;

[UPDATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/update.html) `empleados` [SET](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/set.html) `departamento\_id` = 14 WHERE `departamento\_id` = 77;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.nombre, e.apellido, e.departamento\_id FROM `empleados`e;

[DELETE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/delete.html) FROM `empleados` WHERE `departamento\_id` = 14;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.nombre, e.apellido, e.departamento\_id FROM `empleados`e;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.\* FROM `empleados`e INNER JOIN `departamentos`d ON e.departamento\_id = d.id WHERE d.presupuesto > 80000;

[DELETE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/delete.html) e FROM `empleados` e INNER JOIN `departamentos` d ON e.departamento\_id = d.id WHERE d.presupuesto > 80000;

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.nombre, e.apellido, e.departamento\_id FROM `empleados`e;