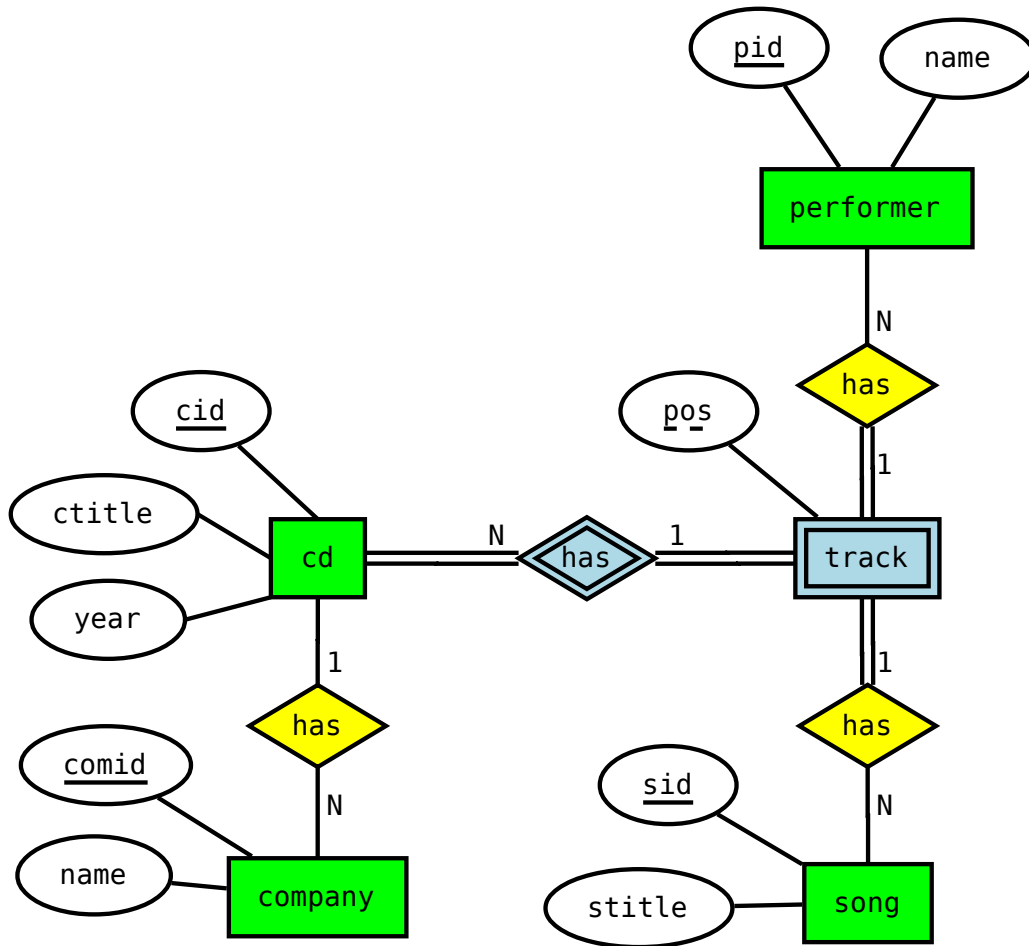


## Η βάση δεδομένων cdbase για την εξάσκηση στην SQL

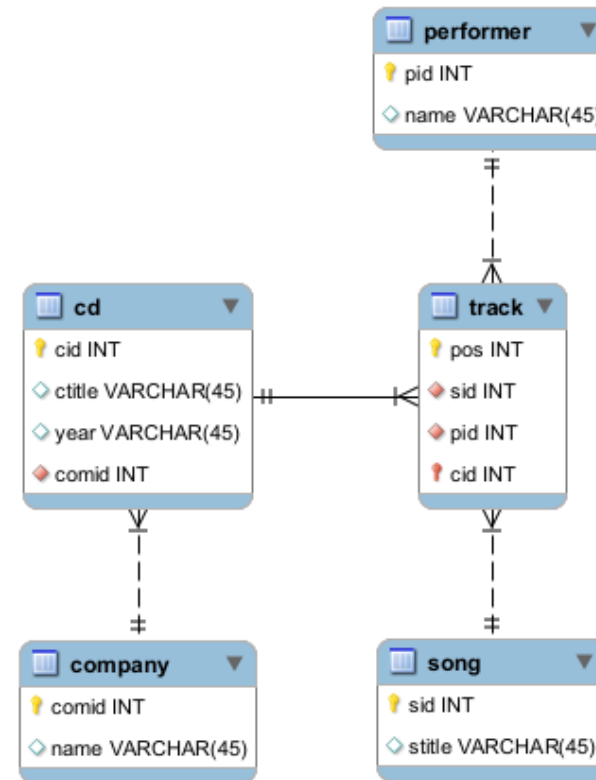
### 1. Ιδεατό Σχήμα (Μοντέλο Ο-Σ)



### 2. Λογικό Σχήμα (Σχεσιακό Μοντέλο)

cd (cid, ctitle, year, comid)  
comid ξένο κλειδί αναφέρεται στο company (comid)  
company (comid, name)  
performer (pid, name)  
song (sid, stitle)  
track (pos, sid, pid, cid)  
sid ξένο κλειδί αναφέρεται στο song (sid)  
pid ξένο κλειδί αναφέρεται στο performer (pid)  
cid ξένο κλειδί αναφέρεται στο cd (id)

Οπτικοποίηση του σχεσιακού σχήματος ως EER στο MySQL Workbench



## Η βάση δεδομένων cdbase για την εξάσκηση στην SQL

### 3. Φυσικό Σχήμα (SQL implementation)

```
-- MySQL Script generated by MySQL Workbench
-- Fri 03 Apr 2020 10:30:26 AM EEST
-- Model: New Model    Version: 1.0
-- 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,ER
ROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';
```

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

```
CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET latin1 ;
USE `mydb` ;
```

```
-----
-- Table `mydb`.`performer`
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`performer` (
  `pid` INT NOT NULL,
  `name` VARCHAR(45) NULL,
  PRIMARY KEY (`pid`))
ENGINE = InnoDB;
```

```
-----
-- Table `mydb`.`song`
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`song` (
  `sid` INT NOT NULL,
  `stitle` VARCHAR(45) NULL,
  PRIMARY KEY (`sid`))
ENGINE = InnoDB;
```

```
-----
-- Table `mydb`.`company`
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`company` (
  `comid` INT NOT NULL,
  `name` VARCHAR(45) NULL,
  PRIMARY KEY (`comid`))
ENGINE = InnoDB;
```

```
-----
-- Table `mydb`.`cd`
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`cd` (
  `cid` INT NOT NULL,
  `ctitle` VARCHAR(45) NULL,
  `year` VARCHAR(45) NULL,
  `comid` INT NOT NULL,
  PRIMARY KEY (`cid`),
  INDEX `fk_cd_company1_idx` (`comid` ASC) VISIBLE,
  CONSTRAINT `fk_cd_company1`
  FOREIGN KEY (`comid`)
  REFERENCES `mydb`.`company` (`comid`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;
```

```
-----
-- Table `mydb`.`track`
-----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`track` (
  `pos` INT NOT NULL,
  `sid` INT NOT NULL,
  `pid` INT NOT NULL,
  `cid` INT NOT NULL,
  PRIMARY KEY (`pos`, `cid`),
  INDEX `fk_TRACK_SONG1_idx` (`sid` ASC) VISIBLE,
  INDEX `fk_track_performer1_idx` (`pid` ASC) VISIBLE,
  INDEX `fk_track_cd1_idx` (`cid` ASC) VISIBLE,
  CONSTRAINT `fk_TRACK_SONG1`
  FOREIGN KEY (`sid`)
  REFERENCES `mydb`.`song` (`sid`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
  CONSTRAINT `fk_track_performer1`
  FOREIGN KEY (`pid`)
  REFERENCES `mydb`.`performer` (`pid`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
  CONSTRAINT `fk_track_cd1`
  FOREIGN KEY (`cid`)
  REFERENCES `mydb`.`cd` (`cid`)
  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;
```