-- MySQL Script generated by MySQL Workbench

-- Mon Mar 18 19:38:52 2024

-- 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,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';

-- ---

-- Schema mydb

-- ---

-- ---

-- Table `Aluno`

-- ---

DROP TABLE IF EXISTS `Aluno` ;

```sql
CREATE TABLE IF NOT EXISTS `Aluno` (
  `CPF` VARCHAR(11) NOT NULL,
  `nome` VARCHAR(45) NOT NULL,
  `sobrenome` VARCHAR(45) NOT NULL,
  `sexo` CHAR NOT NULL,
  `dataNasc` DATE NOT NULL,
  PRIMARY KEY (`CPF`))
ENGINE = InnoDB;


CREATE UNIQUE INDEX `CPF_UNIQUE` ON `Aluno` (`CPF` ASC) VISIBLE;




-- -----------------------------------------------------
-- Table `Area`
-- -----------------------------------------------------
DROP TABLE IF EXISTS `Area` ;

CREATE TABLE IF NOT EXISTS `Area` (
  `sigla` VARCHAR(10) GENERATED ALWAYS AS () VIRTUAL,
  `nome` VARCHAR(45) NOT NULL,
  `superArea` VARCHAR(10) NOT NULL,
  PRIMARY KEY (`sigla`),
  CONSTRAINT `fk_Area_Area`
    FOREIGN KEY (`superArea`)
    REFERENCES `Area` (`sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;


CREATE UNIQUE INDEX `sigla_UNIQUE` ON `Area` (`sigla` ASC) VISIBLE;
```

```sql
CREATE INDEX `fk_Area_Area_idx` ON `Area` (`superArea` ASC) VISIBLE;



-- -------------------------------------------------------

-- Table `Curso`

-- -------------------------------------------------------

DROP TABLE IF EXISTS `Curso` ;


CREATE TABLE IF NOT EXISTS `Curso` (

 `sigla` VARCHAR(10) GENERATED ALWAYS AS () VIRTUAL,

 `nome` VARCHAR(45) NOT NULL,

 `horas` TIME NOT NULL,

 `custo` FLOAT NOT NULL,

 `area` VARCHAR(10) NOT NULL,

 PRIMARY KEY (`sigla`),

 CONSTRAINT `fk_Curso_Area1`

  FOREIGN KEY (`area`)

  REFERENCES `Area` (`sigla`)

  ON DELETE NO ACTION

  ON UPDATE NO ACTION)

ENGINE = InnoDB;


CREATE UNIQUE INDEX `sigla_UNIQUE` ON `Curso` (`sigla` ASC) VISIBLE;


CREATE INDEX `fk_Curso_Area1_idx` ON `Curso` (`area` ASC) VISIBLE;



-- -------------------------------------------------------

-- Table `Matricula`

-- -------------------------------------------------------
```

```sql
DROP TABLE IF EXISTS `Matricula` ;

CREATE TABLE IF NOT EXISTS `Matricula` (
  `data` DATE NOT NULL,
  `pago` TINYINT NOT NULL,
  `aluno` VARCHAR(11) NOT NULL,
  `curso` VARCHAR(10) NOT NULL,
  PRIMARY KEY (`aluno`, `curso`),
  CONSTRAINT `fk_Matricula_Aluno1`
    FOREIGN KEY (`aluno`)
    REFERENCES `Aluno` (`CPF`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
  CONSTRAINT `fk_Matricula_Curso1`
    FOREIGN KEY (`curso`)
    REFERENCES `Curso` (`sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

CREATE INDEX `fk_Matricula_Aluno1_idx` ON `Matricula` (`aluno` ASC) VISIBLE;

CREATE INDEX `fk_Matricula_Curso1_idx` ON `Matricula` (`curso` ASC) VISIBLE;


-- -------------------------------------------------------
-- Table `Modulo`
-- -------------------------------------------------------
DROP TABLE IF EXISTS `Modulo` ;

CREATE TABLE IF NOT EXISTS `Modulo` (
```

```sql
  `sigla` VARCHAR(10) GENERATED ALWAYS AS () VIRTUAL,
  `nome` VARCHAR(45) NULL,
  `curso` VARCHAR(10) NOT NULL,
  PRIMARY KEY (`sigla`),
  CONSTRAINT `fk_Modulo_Curso1`
    FOREIGN KEY (`curso`)
    REFERENCES `Curso` (`sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;


CREATE UNIQUE INDEX `sigla_UNIQUE` ON `Modulo` (`sigla` ASC) VISIBLE;


CREATE INDEX `fk_Modulo_Curso1_idx` ON `Modulo` (`curso` ASC) VISIBLE;




-- -----------------------------------------------------
-- Table `Professor`
-- -----------------------------------------------------
DROP TABLE IF EXISTS `Professor` ;

CREATE TABLE IF NOT EXISTS `Professor` (
  `CPF` VARCHAR(11) NOT NULL,
  `name` VARCHAR(45) NOT NULL,
  `curso` VARCHAR(10) NOT NULL,
  PRIMARY KEY (`CPF`),
  CONSTRAINT `fk_Professor_Curso1`
    FOREIGN KEY (`curso`)
    REFERENCES `Curso` (`sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
```

```sql
ENGINE = InnoDB;


CREATE UNIQUE INDEX `CPF_UNIQUE` ON `Professor` (`CPF` ASC) VISIBLE;


CREATE INDEX `fk_Professor_Curso1_idx` ON `Professor` (`curso` ASC) VISIBLE;




-- -----------------------------------------------------
-- Table `Topico`
-- -----------------------------------------------------
DROP TABLE IF EXISTS `Topico` ;

CREATE TABLE IF NOT EXISTS `Topico` (
  `sigla` VARCHAR(10) GENERATED ALWAYS AS () VIRTUAL,
  `nome` VARCHAR(45) NOT NULL,
  `horas` TIME NOT NULL,
  `modulo` VARCHAR(10) NOT NULL,
  PRIMARY KEY (`sigla`),
  CONSTRAINT `fk_Topico_Modulo1`
    FOREIGN KEY (`modulo`)
    REFERENCES `Modulo` (`sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;


CREATE UNIQUE INDEX `sigla_UNIQUE` ON `Topico` (`sigla` ASC) VISIBLE;


CREATE INDEX `fk_Topico_Modulo1_idx` ON `Topico` (`modulo` ASC) VISIBLE;


SET SQL_MODE=@OLD_SQL_MODE;
```

```sql
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;

SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```