

# HO06: SQL (DDL)

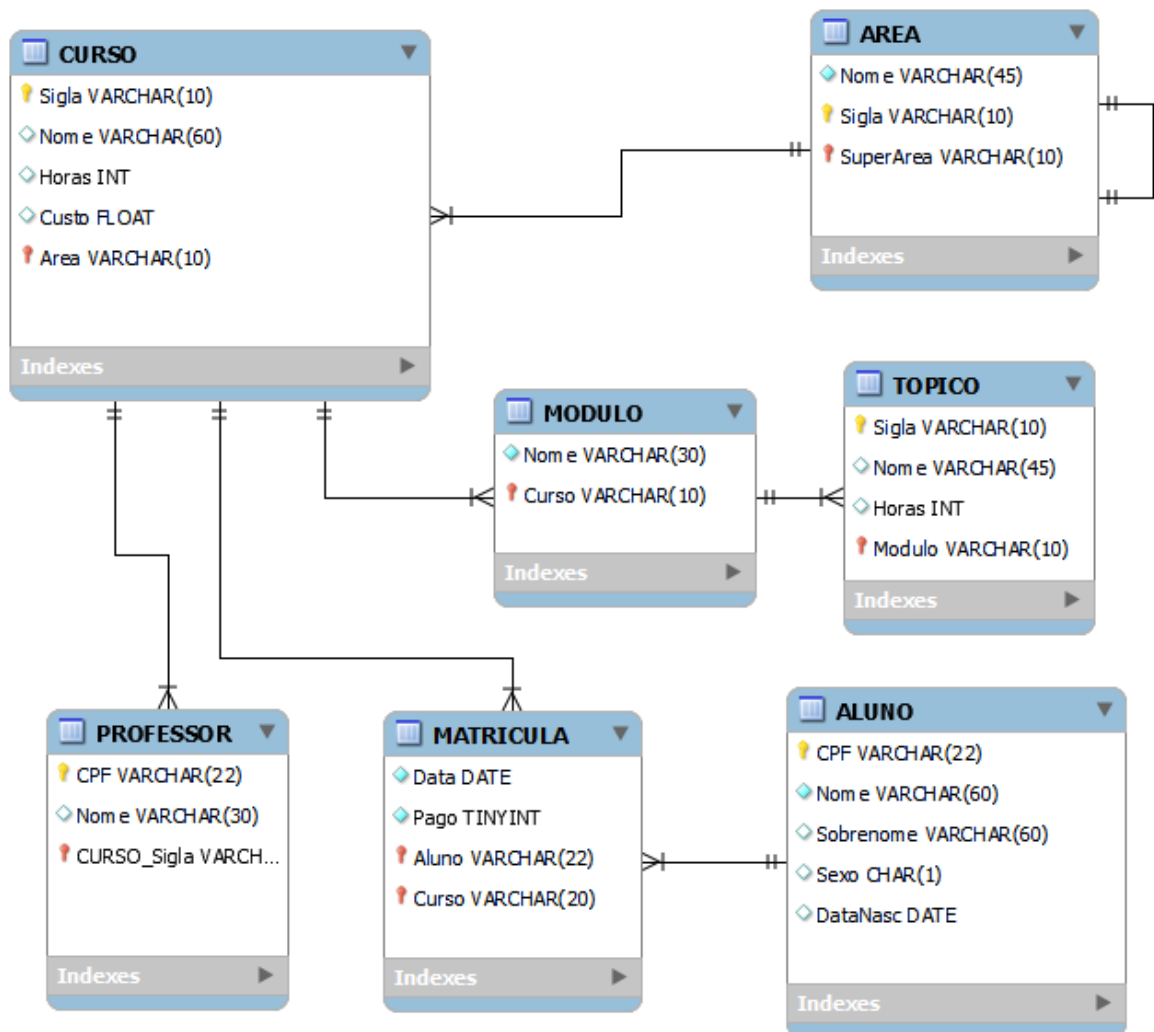
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## 1 Exercício

O aluno deve entregar um documento exclusivamente em formato PDF contendo a solução para o problema descrito anteriormente. O documento deve conter:

- Diagrama de implementação do banco de dados SAM em notação Pé de Galinha (Crow's Foot).
- Consultas SQL para criar o esquema, as tabelas e restrições (domínio, nulidade, unicidade, valor, valor padrão, chave e integridade referencial) do banco de dados SAM.



```

1  -- MySQL Script generated by MySQL Workbench
2  -- Tue Mar 19 19:51:00 2024
3  -- Model: New Model      Version: 1.0
4  -- MySQL Workbench Forward Engineering
5
6  SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
7  SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS
    =0;
8  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';
9
10  -- -----
11  -- Schema mydb
12  -- -----
13
14  -- -----
15  -- Table `ALUNO`
16  -- -----
17  DROP TABLE IF EXISTS `ALUNO` ;
18
19  CREATE TABLE IF NOT EXISTS `ALUNO` (
20      `CPF` VARCHAR(22) NOT NULL,
21      `Nome` VARCHAR(60) NOT NULL,
22      `Sobrenome` VARCHAR(60) NULL,
23      `Sexo` CHAR(1) NULL,
24      `DataNasc` DATE NULL,
25      PRIMARY KEY (`CPF`))
26  ENGINE = InnoDB;
27
28
29  -- -----
30  -- Table `AREA`
31  -- -----
32  DROP TABLE IF EXISTS `AREA` ;
33
34  CREATE TABLE IF NOT EXISTS `AREA` (
35      `Nome` VARCHAR(45) NOT NULL,
36      `Sigla` VARCHAR(10) NOT NULL,
37      `SuperArea` VARCHAR(10) NOT NULL,
38      PRIMARY KEY (`Sigla`),
39      CONSTRAINT `fk_AREA_AREA1`
40          FOREIGN KEY (`SuperArea`)
41          REFERENCES `AREA` (`Sigla`)
42          ON DELETE NO ACTION
43          ON UPDATE NO ACTION)
44  ENGINE = InnoDB;
45
46  CREATE INDEX `fk_AREA_AREA1_idx` ON `AREA` (`SuperArea` ASC) VISIBLE;
47
48
49  -- -----
50  -- Table `CURSO`
51  -- -----
52  DROP TABLE IF EXISTS `CURSO` ;
53

```

```

54 CREATE TABLE IF NOT EXISTS `CURSO` (
55     `Sigla` VARCHAR(10) NOT NULL,
56     `Nome` VARCHAR(60) NULL,
57     `Horas` INT NULL,
58     `Custo` FLOAT NULL,
59     `Area` VARCHAR(45) NOT NULL,
60     PRIMARY KEY (`Sigla`),
61     CONSTRAINT `fk_CURSO_AREA`
62         FOREIGN KEY (`Area`)
63         REFERENCES `AREA` (`Nome`)
64         ON DELETE NO ACTION
65         ON UPDATE NO ACTION)
66 ENGINE = InnoDB;
67
68 CREATE INDEX `fk_CURSO_AREA_idx` ON `CURSO` (`Area` ASC) VISIBLE;
69
70
71 -----
72 -- Table `MATRICULA`
73 -----
74 DROP TABLE IF EXISTS `MATRICULA` ;
75
76 CREATE TABLE IF NOT EXISTS `MATRICULA` (
77     `Data` DATE NOT NULL,
78     `Pago` TINYINT NOT NULL,
79     `Aluno` VARCHAR(22) NOT NULL,
80     `Curso` VARCHAR(20) NOT NULL,
81     PRIMARY KEY (`Aluno`, `Curso`),
82     CONSTRAINT `fk_MATRICULA_ALUNO1`
83         FOREIGN KEY (`Aluno`)
84         REFERENCES `ALUNO` (`CPF`)
85         ON DELETE NO ACTION
86         ON UPDATE NO ACTION,
87     CONSTRAINT `fk_MATRICULA_CURSO1`
88         FOREIGN KEY (`Curso`)
89         REFERENCES `CURSO` (`Sigla`)
90         ON DELETE NO ACTION
91         ON UPDATE NO ACTION)
92 ENGINE = InnoDB;
93
94 CREATE INDEX `fk_MATRICULA_CURSO1_idx` ON `MATRICULA` (`Curso` ASC)
95     VISIBLE;
96
97 -----
98 -- Table `MODULO`
99 -----
100 DROP TABLE IF EXISTS `MODULO` ;
101
102 CREATE TABLE IF NOT EXISTS `MODULO` (
103     `Nome` VARCHAR(30) NOT NULL,
104     `Curso` VARCHAR(10) NOT NULL,
105     PRIMARY KEY (`Curso`),
106     CONSTRAINT `fk_MODULO_CURSO2`
107         FOREIGN KEY (`Curso`)
108         REFERENCES `CURSO` (`Sigla`)

```

```

109         ON DELETE NO ACTION
110         ON UPDATE NO ACTION)
111 ENGINE = InnoDB;
112
113
114 -- -----
115 -- Table `PROFESSOR`
116 -- -----
117 DROP TABLE IF EXISTS `PROFESSOR` ;
118
119 CREATE TABLE IF NOT EXISTS `PROFESSOR` (
120     `CPF` VARCHAR(22) NOT NULL,
121     `Nome` VARCHAR(30) NULL,
122     `CURSO_Sigla` VARCHAR(10) NOT NULL,
123     PRIMARY KEY (`CPF`, `CURSO_Sigla`),
124     CONSTRAINT `fk_PROFESSOR_CURS01`
125     FOREIGN KEY (`CURSO_Sigla`)
126     REFERENCES `CURSO` (`Sigla`)
127     ON DELETE NO ACTION
128     ON UPDATE NO ACTION)
129 ENGINE = InnoDB;
130
131 CREATE INDEX `fk_PROFESSOR_CURS01_idx` ON `PROFESSOR` (`CURSO_Sigla`
132     ASC) VISIBLE;
133
134 -- -----
135 -- Table `TOPICO`
136 -- -----
137 DROP TABLE IF EXISTS `TOPICO` ;
138
139 CREATE TABLE IF NOT EXISTS `TOPICO` (
140     `Sigla` VARCHAR(10) NOT NULL,
141     `Nome` VARCHAR(45) NULL,
142     `Horas` INT NULL,
143     `Modulo` VARCHAR(10) NOT NULL,
144     PRIMARY KEY (`Sigla`, `Modulo`),
145     CONSTRAINT `fk_TOPICO_MODULO1`
146     FOREIGN KEY (`Modulo`)
147     REFERENCES `MODULO` (`Curso`)
148     ON DELETE NO ACTION
149     ON UPDATE NO ACTION)
150 ENGINE = InnoDB;
151
152 CREATE INDEX `fk_TOPICO_MODULO1_idx` ON `TOPICO` (`Modulo` ASC)
153     VISIBLE;
154
155 SET SQL_MODE=@OLD_SQL_MODE;
156 SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
157 SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;

```