**DATABASE ALGORITHM**

Import 🡪 sqlite3

Function 🡨 checkSetup():

conn 🡨 sqlite3.connect(‘Database fileName’)

cursor 🡨 conn.cursor()

cursor.execute("SELECT name FROM sqlite\_master WHERE type is 'table' AND  
 name is 'instructors'")  
   
 result 🡨 cursor.fetchone()

conn.close()

IF result is None

THEN Return 🡨 False

ELSE Return 🡨 True

Function 🡨 setup():

conn 🡨 sqlite3.connect(‘Database fileName’)

cursor 🡨 conn.cursor()

create\_instructions\_table 🡨 """ CREATE TABLE IF NOT EXISTS instructors (

id INTEGER PRIMARY KEY,

name TEXT NOT NULL,

hours INTEGER NOT NULL,

schedule TEXT NOT NULL,

active BOOLEAN NOT NULL DEFAULT 1 CHECK (

active IN (0, 1))

); """

create\_rooms\_table 🡨 """CREATE TABLE IF NOT EXISTS rooms (

id INTEGER PRIMARY KEY,

name TEXT NOT NULL,

type TEXT NOT NULL,

schedule TEXT NOT NULL,

active BOOLEAN NOT NULL DEFAULT 1 CHECK (

active IN (0, 1))

); """

create\_subjects\_table 🡨 """CREATE TABLE IF NOT EXISTS subjects (

id INTEGER PRIMARY KEY,

name TEXT NOT NULL,

hours REAL NOT NULL,

code TEXT NOT NULL,

description TEXT NOT NULL,

instructors TEXT NOT NULL,

divisible BOOLEAN NOT NULL DEFAULT 1 CHECK (

divisible IN (0, 1)),

type TEXT NOT NULL

); """

create\_sections\_table 🡨 """CREATE TABLE IF NOT EXISTS sections (

id INTEGER PRIMARY KEY,

name TEXT NOT NULL,

schedule TEXT NOT NULL,

subjects TEXT NOT NULL,

active BOOLEAN NOT NULL DEFAULT 1 CHECK (

active IN (0, 1)),

stay BOOLEAN NOT NULL DEFAULT 0 CHECK (

active IN (0, 1))

);"""

create\_sharing\_table 🡨 """CREATE TABLE IF NOT EXISTS sharings (

id INTEGER PRIMARY KEY,

subjectId INTEGER NOT NULL,

sections TEXT NOT NULL,

final BOOLEAN NOT NULL DEFAULT 0 CHECK (

final IN (0, 1)

); """

create\_results\_table 🡨 """CREATE TABLE IF NOT EXISTS results (

id INTEGER PRIMARY KEY,

content BLOB NOT NULL,

timestamp DATETIME DEFAULT CURRENT\_TIMESTAMP

); """

cursor.execute(create\_instructors\_table)

cursor.execute(create\_rooms\_table)

cursor.execute(create\_subjects\_table)

cursor.execute(create\_sections\_table)

cursor.execute(create\_sharing\_table)

cursor.execute(create\_results\_table)

conn.commit()

conn.close()

Function 🡨 getConnction():

Return 🡨 sqlite3.connect(‘Database fileName’)