# Contents


**1: What Is IBM Db2?** **1**
From the Mainframe to Distributed Platforms and the IBM Cloud 3
Db2 Today 3

**2: Structured Query Language (SQL)** **5**

**3: The Db2 Call Level Interface** **9**

**4: Python and Db2** **15**
Installing the Python Interpreter 17
IBM Db2 Support for Python 18

**5: Setting Up a Python-Db2 Development Environment** **21**
A Word About *My* Development Platform: the UDOO X86 22
Downloading the Db2 Software 23
Enabling root User Access (*Ubuntu Linux Setup Only*) 25
Preparing a Linux Server for Db2 Installation 25
Installing the Db2 Software 27
Building the SAMPLE Database 36
Installing the Db2 Python Library (Driver) 38
Summary 40

**6: Building Python Applications That Work with Db2** **41**
Functionality Provided by the ibm_db and ibm_db_dbi Python Libraries 42
Special Objects Used by Db2-Python Applications 47
Establishing a Db2 Server or Database Connection 48

Transaction Processing: Executing SQL Statements 51
Transaction Processing: Retrieving Query Results 53
Transaction Processing: Obtaining Result Set Information 56
Transaction Processing: Terminating the Current Transaction 58
Calling Stored Procedures 60
Terminating a Db2 Server or Database Connection 61
Obtaining Information About a Data Source and Setting Driver Options 62
Diagnostics and Error Handling 63