Programming Fundamentals, Object-Oriented Programming, Data Structures and Algorithms using Python, and Learning DBMS and SQL

1. **Programming Fundamentals using Python**a. Introduction to Programming  
   b. Algorithms  
   c. Pseudocode  
   d. Control Structures  
   e. Eclipse Plug-in  
   f. Debugging  
   g. Collections  
   h. Functions  
   i. Exception Handling  
   j. Recursion  
   k. Libraries and Functions  
   l. File Handling
2. **Object-Oriented Programming Retail**a. Introduction  
   b. OOP Basics  
   c. Encapsulation  
   d. Using Objects  
   e. Eclipse tips  
   f. Static  
   g. Relationships  
   h. Inheritance  
   i. Abstract class  
   j. Exception Handling
3. **Data Structures and Algorithms**  
   a. Introduction to Data Structures  
   b. List Data Structure  
   c. Stack  
   d. Queue  
   e. Non-linear Data structures  
   f. Hashing and hash table  
   g. Search algorithm  
   h. Sort algorithm  
   i. Algorithm technique
4. **Learning DBMS and SQL**  
   a. Entities and Relationships diagram  
   b. SQL basics  
   c. DDL statements  
   d. DML statements  
   e. Joins  
   f. Subquery  
   g. Transactions  
   h. Modular query writing  
   i. Normalization  
   j. No SQL databases