

Lab 6b: Advanced Database Concepts

Introduction

Your activity is to learn about advanced database concepts using Microsoft Access. You will work through exercises from Computer Skills Workbook for Fluency with Information Technology, Fifth Edition

Learning Objectives

1. Understand database terminology, including database, table, record, field, and field name
2. Understand data integrity issues and the importance of storing only one copy of data items
3. Create a query using the Design view and multiple tables
4. Create a query using multiple criteria
5. Add tables to a query
6. Create a relationship between tables in a query
7. Generate a report from a query

Assessment

To get full credit, you will need to:

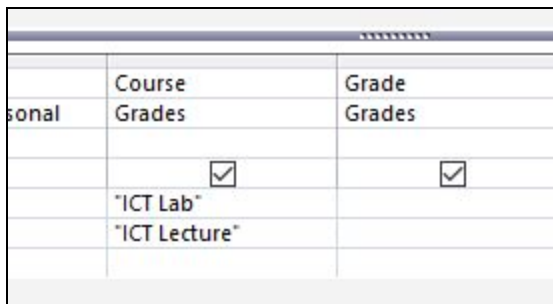
1. Work through the activities in *Advanced Database Concepts Using Microsoft Access.pdf* (pages 229-252)
2. Generate a report with your name

Task 1: Learn about advanced concepts using Microsoft Access

1. To get started, open: [Advanced Database Concepts Using Microsoft Access.pdf](#)
2. Download [academic_records.accdb](#)
3. Work through pages 229-252
 - a. Database Terminology
 - b. Data Integrity
 - c. Primary Key
 - d. Creating a Query
 - e. Criteria in a Query
 - f. Database Relationships
 - g. Creating a Report
4. When completed, submit or show your data to your instructor
5. Move on to Task 2

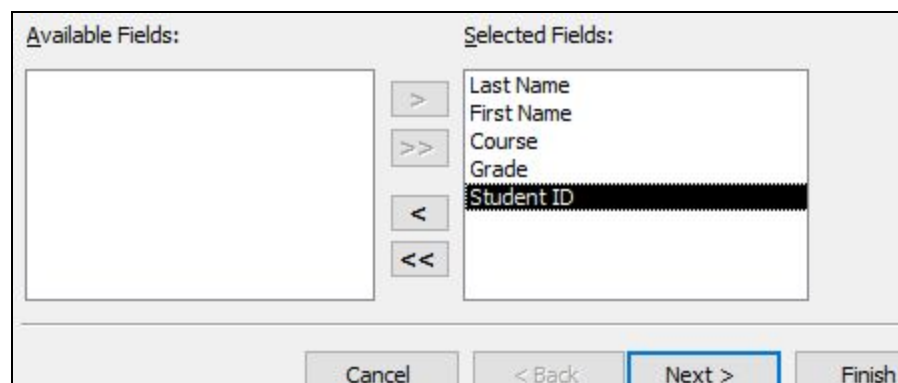
Task 2: Generate a Grade Report

6. Add a new record to the *Faculty* table
 - a. Use your instructor's name
 - b. Enter the next number for the Faculty ID
7. Add new record to the *Student Personal* table with
 - a. Your name, a fake student ID, and a fake birthday
8. Add 2 new records to the *Grades* table for your ICT course
 - a. Course = ICT Lab
 - b. Course = ICT Lecture
 - c. Student ID = same as above
 - d. Faculty ID = same as above
 - e. Enter values for your grades
9. Modify the query in in Figure 10.20 (page 243) to match the course names you added (ICT Lab and ICT Lecture)



Course	Grade
ICT Lab	<input checked="" type="checkbox"/>
ICT Lecture	<input checked="" type="checkbox"/>

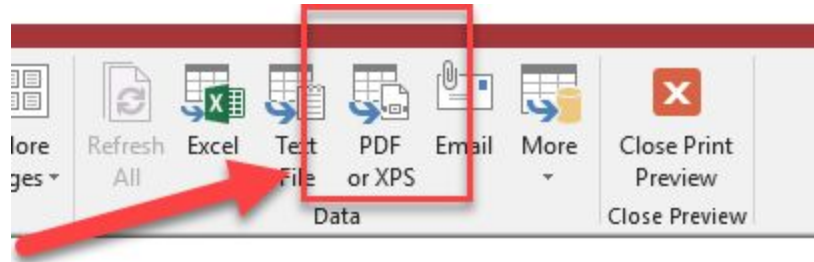
10. Generate a report for your course grades using the query.
 - a. Select all fields



Available Fields:	Selected Fields:
	Last Name
	First Name
	Course
	Grade
	Student ID

Cancel < Back Next > Finish

- b. Save the report as PDF



11. When completed show or submit your document to your instructor