Unit 3

Database Management System

Learning Outcome – Create and edit tables using wizard

Assignment 1

Objective: Steps to create a table using table wizard

Task: Create a table using wizard

Create any table in OO base using table wizard.

Solution

- 1. Click on Start \rightarrow All Programs \rightarrow Open Office 4.1.7 \rightarrow Open Office Base.
- 2. OO Base window will open with Database Wizard. Select or create the database to work

upon it. I have selected existing database db1. Click on Finish button.

Select database	Welcome to the OpenOffice Database Wizard Use the Database Wizard to create a new database, open an existing database file, or connect to a database stored on a server.				
	What do you want to do?				
	Open an existing database <u>file</u>				
	Recently used				
	db1				
	Open				
	O Connect to an existing database				
	JDBC State S				
Help	<< Back Next >> Einish Cancel				
UTION .					

3. Now click on **Tables** button from Left pane and choose **Use Wizard to Create Table...** option from the tasks window.



4. The Table Wizard will open. Follow wizard steps to create a table.

Steps	Select fields for your table
Select fields Set types and formats Set primary key	This wizard helps you to create a table for your database. After selecting a table category and a sample table, choose the fields you want to include in your table. You can include fields from more than one sample table.
4. Create table	Category
	Sample tables
	Assets
	Ayailable fields Selected fields
	AssetID AssetCategoryID BarcodeNumber Comments CurrentValue DateAcquired DateSold DepartmentID
Help	< Back Next > Finish Cancel

 In first step of wizard select the Category either Business or Personal, Table from list of sample tables, and fields from available fields. Click on Finish button.

Steps	Select fields for your tabl	e		
Select fields	This wizard helps you to cr sample table, choose the fi more than one sample tab	eate a table for your ields you want to inc le.	database. After selecting a tabl clude in your table. You can incl	e category and a ude fields from
3. Set primary key 4. Create table	Category		onal	
	Sample tables			
	Employees	~		
	A <u>v</u> ailable fields		Selected fields	
	Address	^	EmployeeID	
	BillingKate Birthdate		LastName	_
	CountryOrRegion	>>	DateHired	~
	Deductions	()	City	1961
	EmailAddress		Department	
	EmployeeNumber	v		

6. Click on Next and select field types and all if you want to change it. Click on Next.

Steps	Set field types and f	formats		
1. Select fields	Selected fields	Field information		
2. Set types and formats	EmployeeID	Field name	Employeell	D
3. Set primary key	LastName	Field type	Integer [IN	TEGEF
4. Create table	DateHired City	AutoValue	No	
	Salary	Entry required		1000
	Department	Entry required	No	~
		Length	10	
	-	+		
Help	-	+ k <u>N</u> ext > f	inish Cano	cel
Help		+ k <u>N</u> ext > j	inish Cano	cel
Help		+	inish Cano	ce <u>l</u>
Help		+ k <u>N</u> ext > <u>i</u>	inish Cano	cel
Help	- Eac	+ k <u>N</u> ext > <u>I</u>	inish Cano	cel
Help		+ k <u>N</u> ext > <u>F</u>	inish Cano	ce <u>i</u>
Help	- (<u>B</u> ac	+ k <u>N</u> ext >	inish Cano	ce <u>i</u>

7. Set a primary key for your table in this step. I have selected EmplyeeID as Primary key.

Steps	Set primary key
1. Select fields 2. Set types and formats 3. Set primary key 4. Create table	A primary key uniquely identifies each record in a database table. Primary keys ease the linking of information in separate tables, and it is recommended that you have a primary key in every table. Without a primary key, it will not be possible to enter data into this table.
	Fieldname EmployeeID Auto value
	O Define primary key as a combination of several fields Agailable fields Primary key fields FirstName Implementation LastName Implementation DateHired Implementation
	LastName DateHired ~

8. If you wish to change the table name then type new name for the table and click on Insert Data immediately, and click on Finish.

steps	Create table				
. Select fields	What do you want to name your table? Employees				
. Set types and formats					
Set primary key	Congratulations. You have entered all the information needed to create your table.				
	What do you want to do next? Insert data immediately Modify the table design Create a form based on this table 				
Help	< <u>B</u> ack <u>Next</u> <u>Finish</u> Cancel				
Insert data.					

Learning Outcome – Retrieve data using query

Assignment 2

Objective: Query creation using wizard **Task:** Create table Marksheet (Using SQL Command)and perform the bellow given queries using wizard and design view.

Field Name	Data Type	Size
Stud_No	Integer	2
Name	Text	15
RollNo	Integer	3
Sub101	Decimal	3,2
Sub102	Decimal	3,2
Sub103	Decimal	3,2

1. In the Database file Add these Fields: (Total: Datatype- Number 3 digits, Percentage:

Datatype - Number 3 digits with 2 decimal places, Grade: Datatype- Char with 2 letters)

- 2. Insert more 3 records in MARKSHEET using SQL mode.
- 3. Display name, rollno, marks of 3 subjects, total and percentage using design view.
- 4. Display name, rollno, grades from the marksheet table using query wizard.
- 5. Display the maximum marks for Sub101 and minimum marks for Sub102 using design view.
- 6. Display the rollno, name and percentage whose percentage are more than 70 using design view.
- 7. Display all the record in ascending order of names using design view.

Solution

Create table command

create table "marksheet" ("Stud_no" tinyint primary key, "Name" varchar(15), "RollNo" tinyint, "Sub101" decimal(5,2), "Sub102" decimal(5,2), "Sub103" decimal(5,2)) **Output**

OL command	
Command to execute	
create table "marksheet" ("Stud_no" tinyint primary key "RollNo" tinyint, "Sub101" decimal(5,2), "Sub102" decir decimal(5,2))	r, "Name" varchar(15), nal(5,2), "Sub103"
	Guessite
Duraina compande	Execute
Previous commands	Execute
Previous commands	Execute
Previous commands	<u>Execute</u>
Previous commands	
Previous commands Status 1: Command successfully executed,	

Queries

- 1. Add Columns
 - 1. Add column Total \rightarrow alter table "marksheet" add column "Total" tinyint
 - 2. Add column Percentage → alter table "marksheet" add column "Percentage" decimal(5,2)
 - 3. Add column grade \rightarrow alter table "marksheet" add column "Grade" char(2)

xecute SQL Statement	×
SQL command	
Command to execute	
alter table "marksheet" add column "Total" tinyint	
alter table "marksheet" add column "Percentage" decima	1(5,2)
alter table "marksheet" add column "Grade" char(2)	
alter table marksheet and column Grade char(2)	
	<u>Execute</u>
Previous commands	
	~
Status	~
Status 1: Command successfully executed.	~ ~
Status 1: Command successfully executed.	

2. Insert records

- 1. insert into "marksheet" values (101, 'Sagar', 105, 27, 25, 28, 80, 88, 'B1')
- 3. Steps to perform a query using design view
 - 1. Click Queries \rightarrow Create Query in Design View....
 - 2. The query design window will open.
 - 3. Select the marksheet table and click on Add button.
 - 4. Now select fields given in the question like name, rollno, marks, Sub101, Sub102, Sub103, Total and Percentage.
 - 5. Save the query.

9	Query1 - db'	1 - OpenOf	fice Base: Ta	able Data Vie	ew			
<u>F</u> ile	<u>File Edit View Insert Tools Window H</u> elp							
1	🗟 🔀 💫 🛍 🎾 🛍 🌌 • 🎍 🕺 🛠 🌱 🗸 😤 📕							•
	Stud_no	Name	Sub101	Sub102	Sub103	Total	Percentage	Г
D	101	Sagar	27.00	25.00	28.00	80	88.00	
	102	Amita	22.00	28.00	23.00	73	81.00	
Ø								

- 4. Query Wizard Steps
 - 1. Click on Queries \rightarrow Use Wizard to Create Query...

 - Query Wizard opens.
 Select the table marksheet and Select the fields given the question.
 - 4. Click on finish.

<u>Steps</u>	Select the fields (columns) for your que	егу
1. Field selection 2. Sorting order	Tables Table: marksheet	
3. Search conditions 4. Detail or summary	Available fields	Fields in the Query:
5. Grouping 6. Grouping conditions 7. Aliases 8. Overview	Stud_no Sub101 Sub102 Sub103 Total Percentage	marksheet.Neme marksheet.GilNo marksheet.Grade
		<

Output

S <u>F</u> ile	Query_m <u>E</u> dit <u>V</u> i	arksheet - o ew <u>I</u> nsert	db1 - Open(<u>T</u> ools <u>W</u>	Office Base: Table Data View (indow <u>H</u> elp
1.10		🗙 🖷 (â Ю	₩ 8 · 1 2 28 28 × 7 1 * .
	Name	RollNo	Grade	
D	Sagar	105	A2	
	Amita	103	A2	

- 5. Display maximum marks and minimum marks for the fields given in the question, using design view.
 - 1. Click Queries \rightarrow Create Query in Design View....
 - 2. The query design window will open.
 - 3. Select the marksheet table and click on Add button.
 - 4. Now select the field Sub101 and Sub102.
 - 5. Choose the function maximum under Sub101 and Minimum under Sub102.
 - 6. Save the query and check the result.

<	ь101	Sub102			
Table			N 10		
Sort					
Visible	2				
Function Ma	ximum	Minimum 🛩			
Criterion					

1] 2 X 🖷 🛍 10	🛍 🖉 • 👌 🧎 👯 🕅 🛠	7717	
1	MAX("marksheet"."Sub101")	MIN("marksheet"."Sub102")		

- 6. Display the rollno, name and percentage whose percentage are more than 70 using design view
 - 1. Click Queries \rightarrow Create Query in Design View....
 - 2. The query design window will open.
 - 3. Select the marksheet table and click on Add button.
 - 4. Select columns given in the question i.e. Rollno, Name and Percentage.
 - 5. Type >70 in the front of criteria under the percentage field.
 - 6. Save the query and check the result.

* mar * Stud Nam Roll Sub Sub	ksheet no No 101 102 V			
Field	RollNo	Name	Percentage	
Alias				
Table				
Sort				
Visible				
Function	-		-	2
Criterion			> 70	1

Output



- 7. Display all the record in ascending order of names using design view.
 - 1. Click Queries \rightarrow Create Query in Design View....
 - 2. The query design window will open.
 - 3. Select the marksheet table and click on Add button.
 - 4. Select markesheet.* and name in the column list.
 - 5. Select sort → ascending under name field.
 1.Now click on Visible checkbox to hide the name column in result.
 2.Save the query and check the result.

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	W Str Str Su Su	arksheet ud_no ame bllNo ib101 ib102	`						
	<			Î	Ĩ		1		1
	Field	mark	sheet.*	Name					
	Alias		10. 21.0V						
	Table	mark	heet	marksh	eet	_			_
	Sort		-	ascend	ing			_	
S Eil	Query4 - db e <u>E</u> dit <u>V</u> ie C <u>E</u> dit <u>V</u> ie Stud_no	1 - OpenOf w _Insert 🖌 🖷 🖨	fice Base: T Tools <u>W</u> i 100 1 RollNo	able Data Vi ndow <u>H</u> elp Mail 23 • Sub101	ew 2 2 2 3 3 8 0 5 0 5 0 102	🔏 🛠 - Sub103	양	Percentage	Grade
	102	Amita	103	22.00	28.00	23.00	73	81.00	A2
Þ	101	Sagar	105	27.00	25.00	28.00	80	88.00	A2
Þ		-202							
0									

Assignment 3

Learning Outcome – Create Forms and Reports using wizard

Objective: Creating form using wizard

Task: Create table a form using wizard by selecting all the fields for the table - Marksheet

Solution

Steps to create a form using wizard

- 1. Click on Forms \rightarrow Use Wizard to Create Form...
- 2. A Form Wizard appears.

Steps	Select the fields of your form	
1. Field selection	Tables or queries	
2. Set up a subform	Table: marksheet	
3. Add subform fields	Available fields Fields in the fo	rm
4. Get joined fields	Stud_no	
5. Arrange controis	> Name RollNo	
6. Set data entry	Sub101	
7. Apply styles	Sub102	
8. Set name	< Sub103	×.
	Total	
	Grade	
	Binary fields are always listed and selectable from the left list If possible, they are interpreted as images.	t.

- 3. Select the table from Tables or Queries then add all the fields.
- 4. Click on Next button. Ignore step 3 and step 4.

5. Select the first option i.e. Columnar – Labels Left then click on the next button.

Steps	Arrange the controls on your form	
1. Field selection 2. Set up a subform 3. Add subform fields	Label placement Align <u>l</u> eft Align right	-
4. Get joined fields	Arrangement of the main form	-
5: Arrange controls 6: Set data entry 7: Apply styles 8: Set name	Columnar - Labels Left	
	Arrangement of the subform	-
	As Data Sheet	

6. Now set data entry step will be there. Ignore this step and click on Next. Choose the styles for the form interface and click on next.

DallNa	Steps	Apply the style of your form		
Rollino	21542	rippi die style of jour tori		
Sub101	1. Field selection	Apply styles Reine	Field border	
Sub102	2. Set up a subform	Violet	O No border	
Sub103	4 Get joined fields	Bright Blue Light Gray	(€ <u>3</u> D look	
Total	5. Arrange controls	Dark	() Flat	
Percentage	6. Set data entry	Ice Blue		
Grade	7. Apply styles	Grey Water		
	8. Set name	Red		
	Help	< <u>B</u> ack	Next > Einish Cancel	

7. Type new name for the form and click on work with the form. Click on Finish

Steps	Set the name of the form
I. Field selection	Name of the form
2. Set up a subform	MarkSheet_Form
I. Add subtorm fields I. Get joined fields	How do you want to proceed after creating the form?
. Arrange controls	Work with the form
5. Set data entry	O Modify the form
7. Apply styles	
3. Set name	

Assignment 4

Objective: Creating report using wizard

Task: Create table a report using wizard by selecting all the fields for the table - Marksheet

Solution

- 1. Click on Reports → Use Wizard to Create report. The report wizard will open in the new window.
- 2. Select the table and add fields.

1. Field selection 2. Labeling fields 3. Grouping 4. Sort options 5. Choose layout 5. Create report Available fields Fields in report Stud_no Name RollNo Sub101 Sub101 Sub102 Sub103 Total Percentage Grade Binary fields cannot be displayed in the report.	. Field selection . Labeling fields	Tables <u>o</u> r queries			
2. Labeling fields 3. Grouping 4. Sort options 5. Choose layout 5. Create report Sub101 Sub101 Sub101 Sub101 Sub102 Sub103 Total Percentage Grade Binary fields cannot be displayed in the report.	. Labeling fields				
3. Grouping Available fields Eields in report 4. Sort options Stud_no Name 5. Choose layout > Stud_no 5. Create report > Sub101 Sub101 Sub102 Sub103 Total Percentage Grade Binary fields cannot be displayed in the report. Binary fields cannot be displayed in the report.		lable: marksheet	~		
A. Sort options 5. Choose layout 5. Create report S. Create report Binary fields cannot be displayed in the report. Stud_no Name RollNo Sub101 Sub102 Sub103 Total Percentage Grade	. Grouping	<u>A</u> vailable fields		Eields in report	
	i. Choose layout i. Create report	Binary fields canno	t be displayed in the	Stud_no Name RollNo Sub101 Sub102 Sub103 Total Percentage Grade	· · ·

3. Now change the label text that you want in the report. I have changed the label Stud_no into Adm. No. Click on Next.

Steps	How do you want	t to label the fields?	
1. Field selection	Field	Label	
2. Labeling fields	Stud_no	Adm. No	
4. Sort options	Name	Name	
5. Choose layout	RollNo	RollNo	
6. Create report	Sub101	Sub101	
	Sub102	Sub102	
	Sub103	Sub103	
	Total	Total	□.

- 4. I have skipped groping and sorting options by click on Next button.
- 5. Now choose the layout. I have selected Outline-Elegant as Layout of Data, Landscape

Orientation, and Bubbles Layout of Headers and Footers. Click on Next.

Steps	How do you want your report to look?		
. Field selection	Layout of data	Layout of headers	and footers
2. Labeling fields 3. Grouping 4. Sort options 5. Choose layout 5. Create report	Default Outline - Borders Outline - Compact Outline - Elegant Outline - Highlighted Outline - Modern Outline - Red & Blue Outline, indented - Borders Outline, indented - Compact Outline, indented - Elegant Outline, indented - Highlighted Outline, indented - Highlighted Outline, indented - Modern	Bubbles Cinema Controlling Default Drafting Finances Flipchart Formal with Comp Generic Worldmap	oany Logo
	Orientation Landscage Portrait	Note: The dummy by data from the d report is created.	text <u>w</u> ill be replaced atabase when the
Help	< Back Next >	Einish	Cancel

- 6. Now type the title of the report and select dynamic report → Create report now option.
- 7. Now click on finish.

Steps 1. Field selection	Decide how you want to proceed Title of report	
2. Labeling fields 3. Grouping 4. Sort options 5. Choose layout 6. Create report	marksheet What kind of report do you want to create? Static report Dynamic report How do you want to proceed after creating the report? Modify report layout © create report now	
Help	c Back Next > Einith	Cancel

Output

Name RollNo Sub101 Sub102 Sub103 Total Percent- age Grade agar 105 27 25 28 80 88 A2 mita 103 22 28 23 73 81 A2	100	1		1		1	1	100 00	
agar 105 27 25 28 80 88 A2 mita 103 22 28 23 73 81 A2	Adn. No	Name	RollNo	Sub101	Sub102	Sub103	Total	Percent-	Grade
ana izo iz izo izo izo izo izo izo	101	Sagar	105	27	25	28	80	88	A2 A2