

Unit 2: Electronic Spreadsheet (Advanced)

Assignment 1

Objective: Applying Data Consolidation in OO Calc.

Task:

- Create a new file in spreadsheet software and enter data for 10 salesmen. Add two worksheets in the file and modify the data for all 3 quarters.
- Rename all worksheets like sheet1 - 2018, sheet2 - 2019 and sheet3 - 2020.
- Now add one more worksheet at the end and rename as consolidated sheet.
- Now type the serial no and names as displayed, use sum function to add data for 2018, 2019 and 2020 in respective cells using consolidation.

	A	B	C	D	E
1	S.No	Name	Quarter 1	Quarter 2	Quarter 3
2		1 Anil	751	789	760
3		2 Amit	834	755	835
4		3 Ankush	831	825	811
5		4 Bhavin	725	803	785
6		5 Bhavya	754	794	710
7		6 Bharti	700	812	703
8		7 Chandani	754	734	698
9		8 Dhara	767	776	705
10		9 Dhaval	772	802	847
11		10 Gaurang	791	822	805
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

2018 2019 2020 Consolidated

Sheet 4 / 4 Default

Solution:

- Create a new spreadsheet in OO Calc.
- Enter the data for Sheet 1 and rename sheet as 2018. To rename the worksheet right click on sheet tab then type the desired name. Press enter key to accept the name.

	A	B	C	D	E	
1	S.No	Name	Quarter 1	Quarter 2	Quarter 3	
2		1 Anil	250	260	269	
3		2 Amit	258	235	274	
4		3 Ankush	275	268	241	
5		4 Bhavin	259	259	263	
6		5 Bhavya	263	257	236	
7		6 Bharti	241	275	239	
8		7 Chandani	274	254	257	
9		8 Dhara	268	276	254	
10		9 Dhaval	258	253	271	
11		10 Gaurang	263	274	281	
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14 15 16 17 18 19 20 21 22 23 24

2018 / 2019 / 2020 / Consolidated

- Follow the same instructions for next two worksheets.
- Add one more worksheet to display the consolidation result and rename as Consolidated.

5. Select the cell ranges where results needs to appear.

	A	B	C	D	E
1	S.No	Name	Quarter 1	Quarter 2	Quarter 3
2		1 Anil			
3		2 Amit			
4		3 Ankush			
5		4 Bhavin			
6		5 Bhavya			
7		6 Bharti			
8		7 Chandani			
9		8 Dhara			
10		9 Dhaval			
11		10 Gaurang			

6. Click on Data → Consolidate option. A consolidate dialog box will appear.

7. Select your desired function (Sum here) and add references to the cells by selecting ranges.

8. Move the cursor on 2018 work sheet and select the range. Click on Add button.

The screenshot shows the Excel interface with the 'Consolidate' dialog box open. The dialog box has the following fields:

- Function:** Sum
- Consolidation ranges:** \$'2018'.:\$C\$2:\$E\$11
- Source data range:** - undefined - (with a dropdown arrow)
- Copy results to:** - undefined - (with a dropdown arrow)

The 2018 worksheet data is visible in the background, showing the same structure as the first table but with numerical values:

	A	B	C	D	E
1	S.No	Name	Quarter 1	Quarter 2	Quarter 3
2		1 Anil	250	260	269
3		2 Amit	258	235	274
4		3 Ankush	275	268	241
5		4 Bhavin	259	259	263
6		5 Bhavya	263	257	236
7		6 Bharti	241	275	239
8		7 Chandani	274	254	257
9		8 Dhara	268	276	254
10		9 Dhaval	258	253	271
11		10 Gaurang	263	274	281

9. Repeat the same for 2019 and 2020 worksheet respectively.

10. Click on OK button.

Assignment 2

Objective: Applying subtotal in OO Calc.

Task: Prepare a worksheet as following

Untitled 1 - OpenOffice Calc

File Edit View Insert Format Tools Data Window Help

marksadd

Find

Arial 10 B I U

D2:D9 =B2*C2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	fruit names	Qty	Rate	Total											
2	Apple	1	200	200											
3	orange	2	50	100											
4	Guava	3	40	120											
5	orange	2	50	100											
6	Apple	1	200	200											
7	Guava	2	40	80											
8	orange	3	50	150											
9	Apple	2	200	400											
10															
11															
12															
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31															

Sheet1 / Sheet2 / Sheet3

Sum=1350

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Solution:

- Open spreadsheet software and enter the data as following:
- Select the data. Needs to be grouped using subtotal

Untitled 1 - OpenOffice Calc

File Edit View Insert Format Tools Data Window Help

marksadd

Find

A1:D9

fruit names

	A	B	C	D
1	fruit names	Qty	Rate	Total
2	Apple	1	200	200
3	orange	2	50	100
4	Guava	3	40	120
5	orange	2	50	100
6	Apple	1	200	200
7	Guava	2	40	80
8	orange	3	50	150
9	Apple	2	200	400

Subtotals

1st Group 2nd Group 3rd Group Options

Group by

fruit names

Calculate subtotals for

- ☒ fruit names
- ☒ Qty
- ☒ Rate
- ☒ Total

Use function

- Sum
- Count
- Average
- Max
- Min
- Product
- Count (numbers only)
- StDev (Sample)
- StDevP (Population)
- Var (Sample)
- VarP (Population)

OK Cancel Help Reset Delete

Sheet1 / Sheet2 / Sheet3

Sum=2196

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Output

Untitled 1 - OpenOffice Calc

File Edit View Insert Format Tools Data Window Help

marksadd

Find

A1:D13

fruit names

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	fruit names	Qty	Rate	Total										
2	Apple	1	200	200										
3	Apple	1	200	200										
4	Apple	2	200	400										
5	0	4	600	800										
6	Guava	3	40	120										
7	Guava	2	40	80										
8	0	5	80	200										
9	orange	2	50	100										
10	orange	2	50	100										
11	orange	3	50	150										
12	0	7	150	350										
13	0	16	830	1350										
14														
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Sheet1 / Sheet2 / Sheet3

Sum=6588

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Learning Outcome – Share and review a spreadsheet

Assignment 3

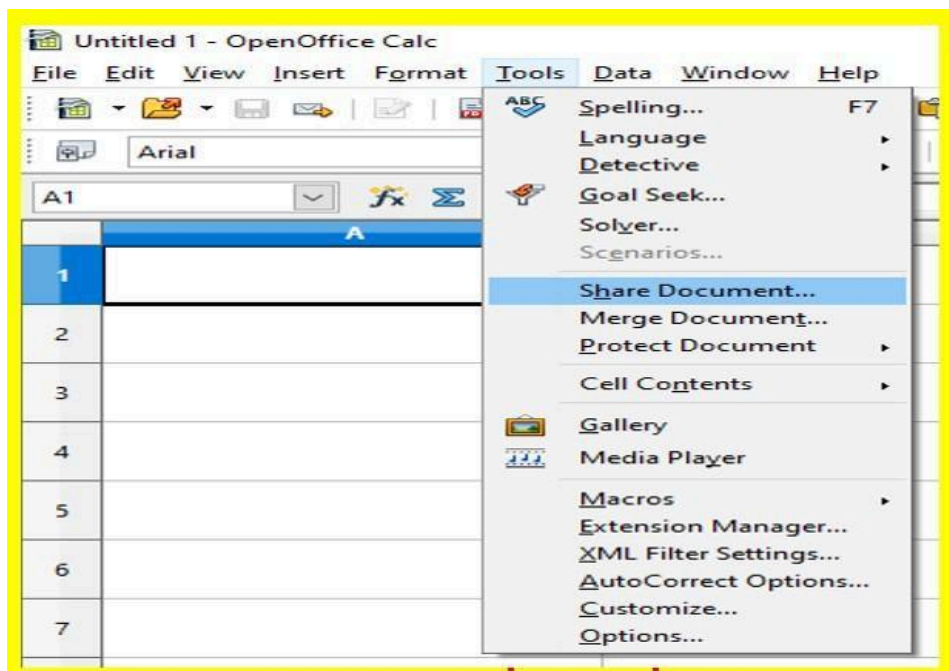
Objective: Setting up a spreadsheet for sharing.

Task: Create a new file in spreadsheet software and enable sharing.

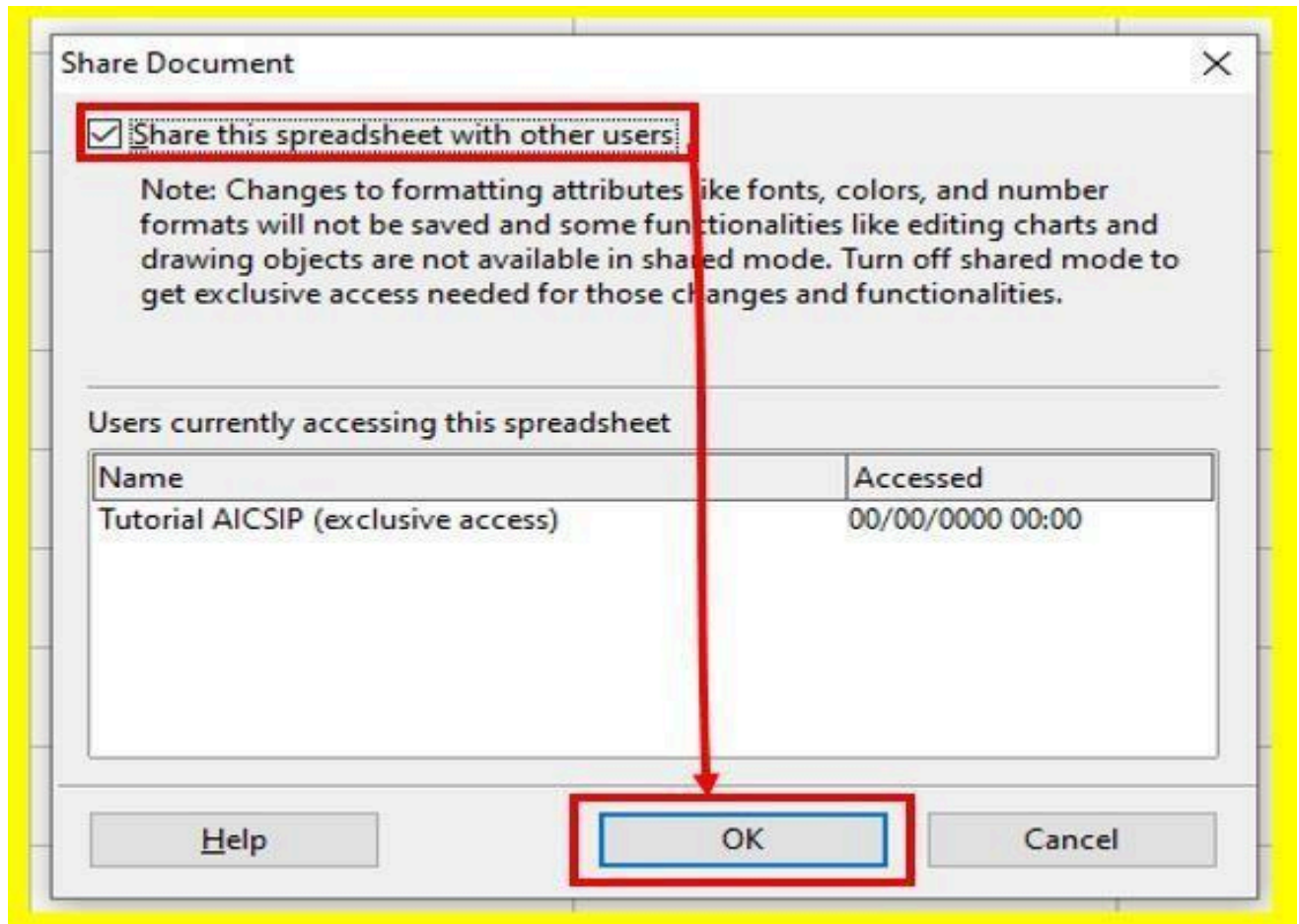
1. Create a new worksheet, enter data as you wish.
2. Save your worksheet with your desired name.
3. Enable sharing for your worksheet.

Solution

1. Create a new worksheet and enter data.
2. Click on File □ Save and Use proper name for the worksheet.
3. Click on Tools □ Share Document.



4. The Share Document dialog box will appear. Click on Share this spreadsheet with other users.



5. Click OK button.

Assignment 4

Objective: Goal seek Application

Task: A student is planning her goals about the marks she should attain in the forthcoming examinations in order to achieve a distinction (75%). Assuming that the examination of each subject is for 100 marks, her marks of PT 1 and Term 1 are given as under.

	English	Maths	Science
PT 1	72	63	54
Term 1	70	69	80

Find out how many marks should she obtain in term 2 to secure distinction.

Solution:

	A	B	C	D	E
1		English	Maths	Science	%
2	PT 1	72	63	54	63
3	Term 1	70	69	80	73
4	Term 2	83	93	91	89
5		75	75	75	75

1. Enter data as given in the data itself.
2. Place the cursor to get the result for the marks of term 2.
3. Place the cursor in B5 and write average () formula.
4. Now click on Tools ☐ Goal Seek option.
5. Check the formula cell (it should be B5 only).
6. Now write the target value i.e. 75.
7. Select the cell B4 to see the value to adjust the marks.
8. Repeat the same steps Maths and Science as well.

Learning Outcome – Create and use Macro in Spreadsheet

Assignment 5

Objective: Create and use Macro in Spreadsheet

Task: Prepare a worksheet as following

Untitled 1 - OpenOffice Calc

File Edit View Insert Format Tools Data Window Help

marksadd

Arial 10 B I U

F3

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Sr.No	Name	Class	Section	House										
2	1	Ranjit Kumar	9	A	GREEN										
3	2	Ravi Singh	19	B	RED										
4	3	Anshuman Tiwari	9	C	YELLOW										
5	4	Santosh Singh	10	D	BLUE										
6	5	Randheer Singh	8	A	GREEN										
7	6	Om Parkash Singh	10	B	RED										
8	7	Hariom Kumar	9	C	YELLOW										
9	8	Alok Singh	8	D	BLUE										
10	9	Rakhi Kumari	10	E	GREEN										
11	10	Sadam Khan	10	F	RED										
12															
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31															

Sheet1 / Sheet2 / Sheet3

Sheet 1 / 3

Default

STD *

Sum=0

100 %

Type here to search

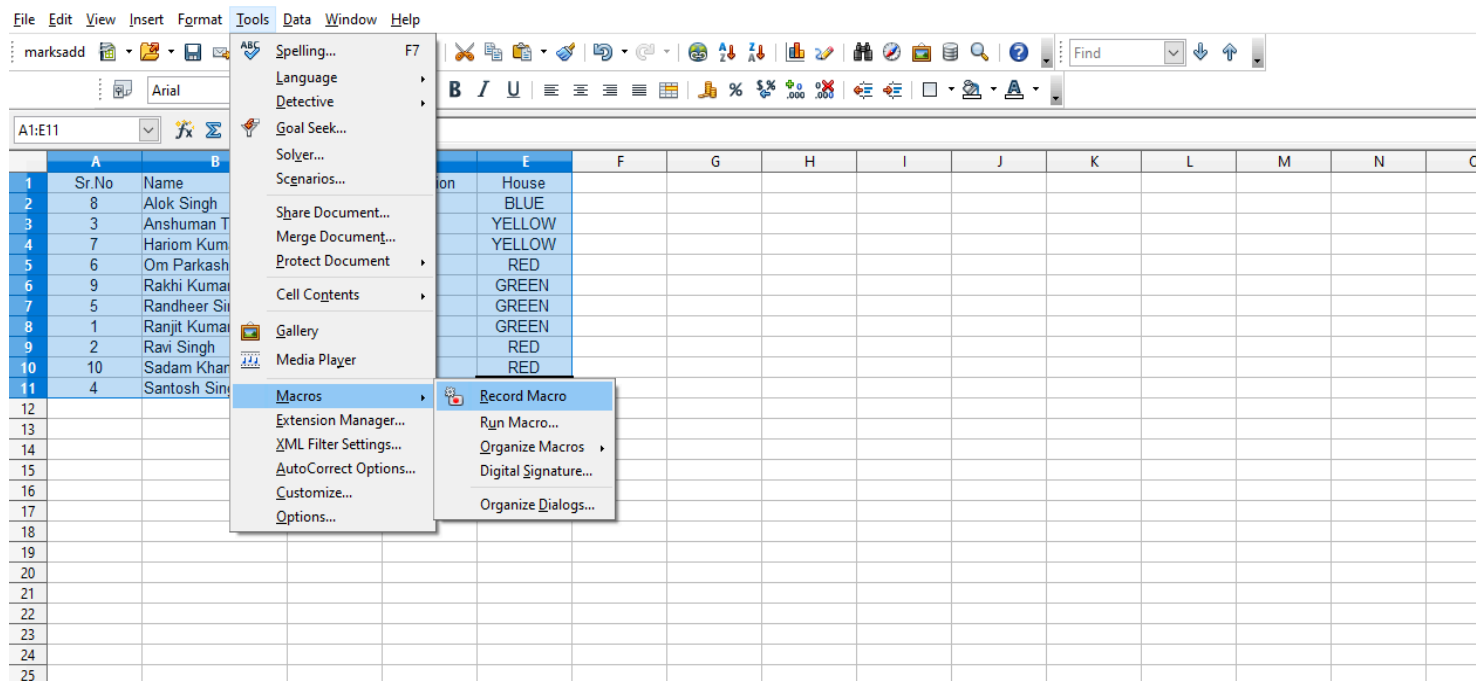
21°C

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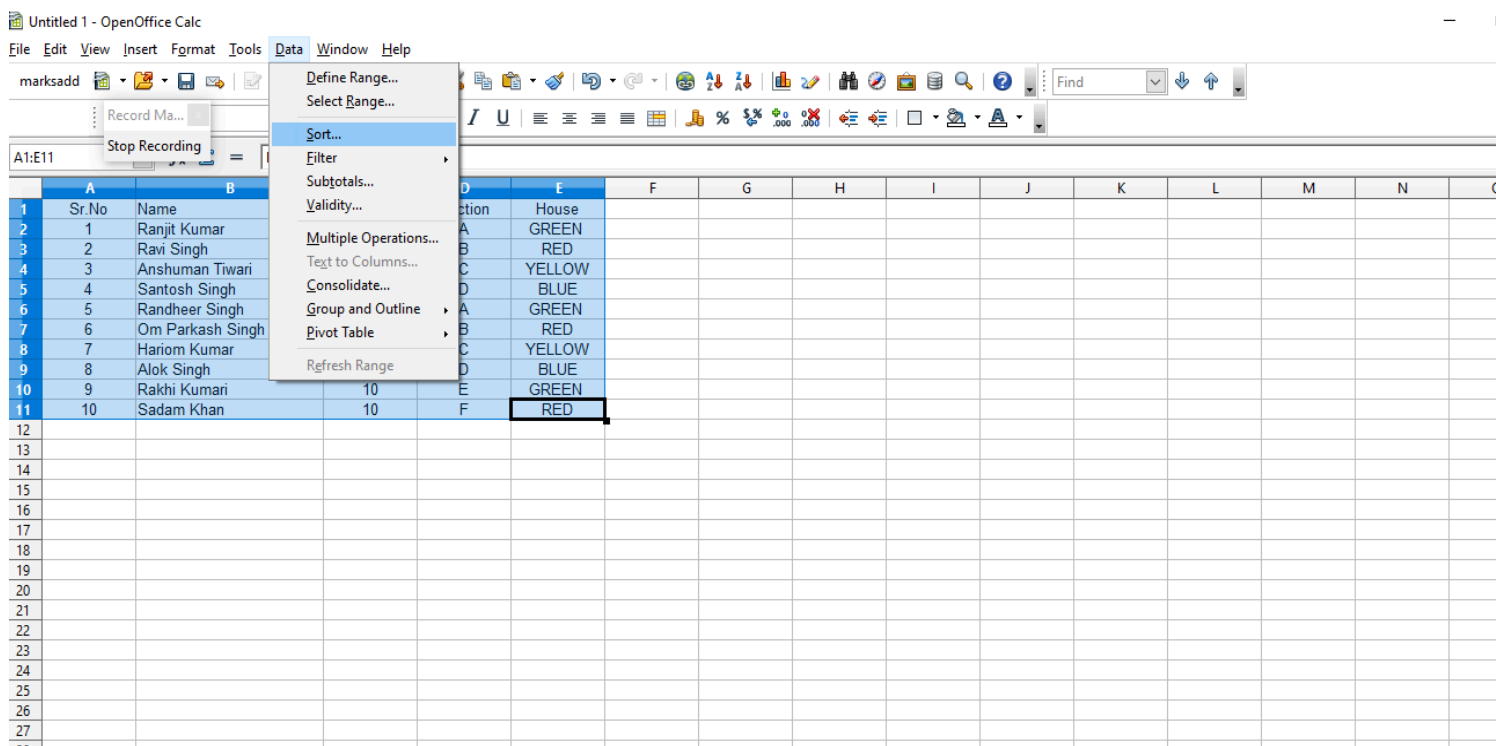
11/30/2022

Solution:

1. Open spreadsheet software and enter the data as following:
2. Select the data. Needs to be Record macro
3. Tool ▢ Macro ▢ Record Macro Stop Recording dialog box appears.



Then go to sort data tab and select sort option



Stop recording->create new module ->create new library->save as sort

Untitled 5 - OpenOffice Calc

File Edit View Insert Format Tools Data Window Help

marksadd

Record Macro

Stop Recording

10

B / U

Find

AT:E11

Sr.No

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Sr.No	Name	Class	Section	House										
2	8	Alok Singh	8	D	BLUE										
3	3	Anshuman Tiwari	9	C	YELLOW										
4	7	Hariom Kumar	9	C	YELLOW										
5	6	Om Parkash Singh	10	B	RED										
6	9	Rakhi Kumari	10	E	GREEN										
7	5	Randheer Singh	8	A	GREEN										
8	1	Ranjit Kumar	9	A	GREEN										
9	2	Ravi Singh	19	B	RED										
10	10	Sadam Khan	10	F	RED										
11	4	Santosh Singh	10	D	BLUE										
12															
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OpenOffice Basic Macros

Macro name

sort

Save macro in

Existing macros in: Module2

Main

My Macros

class10

Standard

Module1

OpenOffice Macros

Untitled 5

Library1

Module1

Module2

Save

Close

New Library

New Module

Help

Sheet1 / Sheet2 / Sheet3

Sheet 1 / 3

Default

STD

Sum=157

100 %

Type here to search

21°C

7:27 PM

11/30/2022

Go to Tool menu->Select macro->Run macro->library1->module2->sort->Run

Untitled 5 - OpenOffice Calc

File Edit View Insert Format Tools Data Window Help

marksadd

A1:E11

	A	B	C	D	E
1	Sr.No	Name	Class	Section	House
2	8	Alok Singh	8	D	BLUE
3	4	Santosh Singh	10	D	BLUE
4	9	Rakhi Kumari	10	E	GREEN
5	5	Randheer Singh	8	A	GREEN
6	1	Ranjit Kumar	9	A	GREEN
7	6	Om Parkash	10	B	RED
8	2	Ravi Singh	19	B	RED
9	10	Sadam Khan	10	F	RED
10	3	Anshuman Tiwari	9	C	YELLOW
11	7	Hariom Kumar	9	C	YELLOW

Macro Selector

Select the library that contains the macro you want. Then select the macro under 'Macro name'.

Library

- My Macros
- OpenOffice Macros
- Untitled 5
 - Library1
 - Module1
 - Module2
 - Standard

Macro name

- Main
- sort

Run

Cancel

Help

Description

Output:

Untitled 5 - OpenOffice Calc

File Edit View Insert Format Tools Data Window Help

marksadd

A1:E11

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Sr.No	Name	Class	Section	House										
2	8	Alok Singh	8	D	BLUE										
3	3	Anshuman Tiwari	9	C	YELLOW										
4	7	Hariom Kumar	9	C	YELLOW										
5	6	Om Parkash Singh	10	B	RED										
6	9	Rakhi Kumari	10	E	GREEN										
7	5	Randheer Singh	8	A	GREEN										
8	1	Ranjit Kumar	9	A	GREEN										
9	2	Ravi Singh	19	B	RED										
10	10	Sadam Khan	10	F	RED										
11	4	Santosh Singh	10	D	BLUE										

Sheet2 / 3

Default

STD

Sum=157

21°C

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11/30/2022

Unit 3

Database Management System

Learning Outcome – Create and edit tables using wizard

Assignment 1

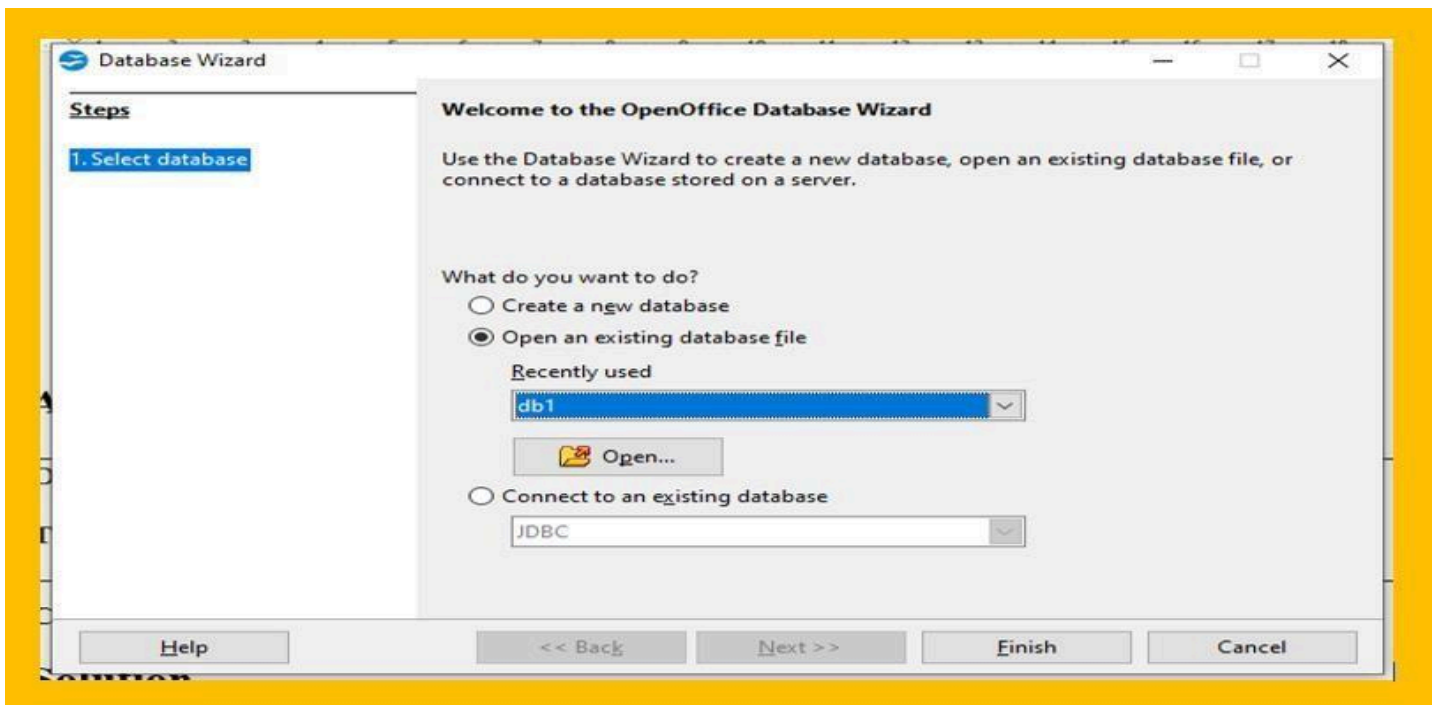
Objective: Steps to create a table using table wizard

Task: Create a table using wizard

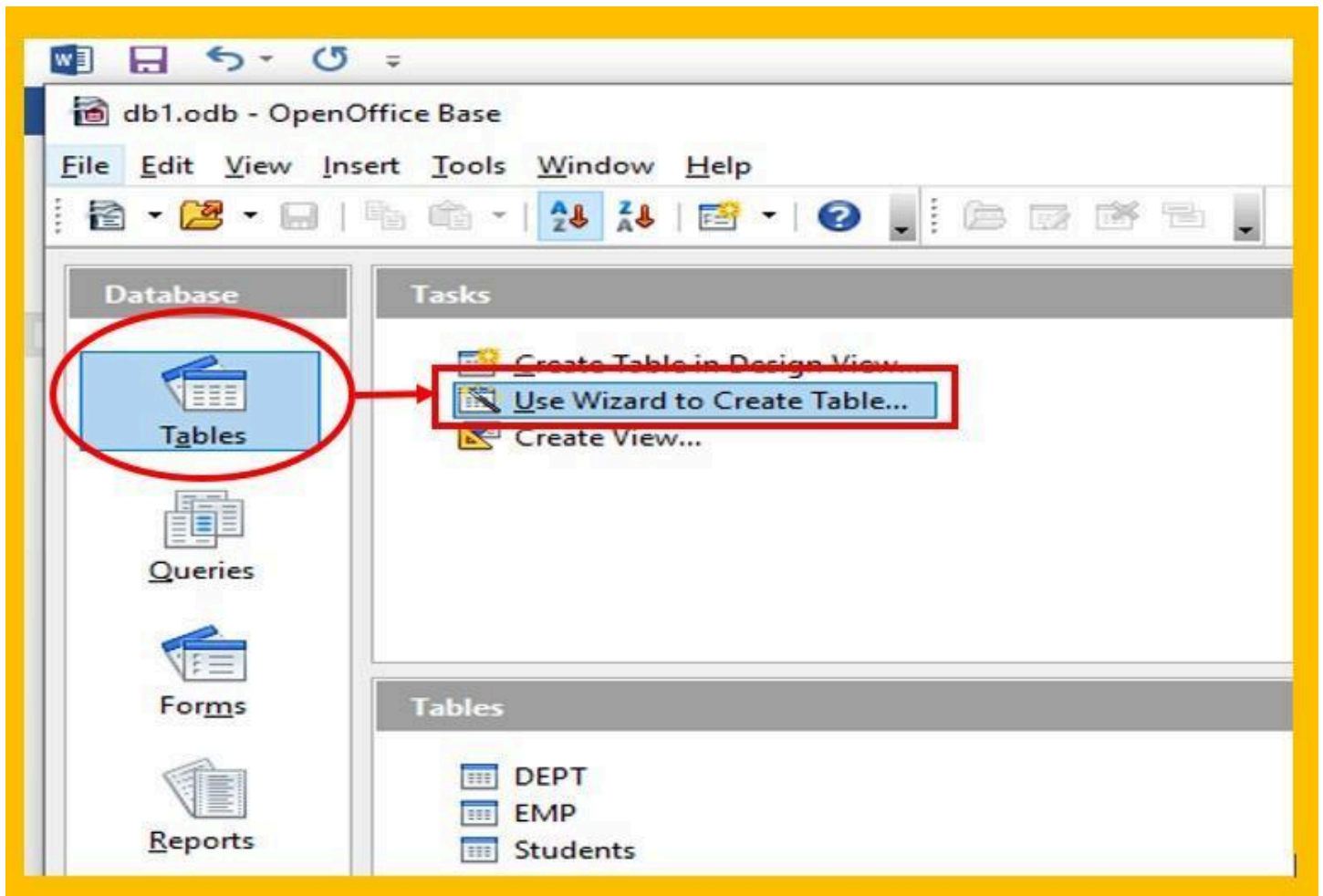
Create any table in OO base using table wizard.

Solution

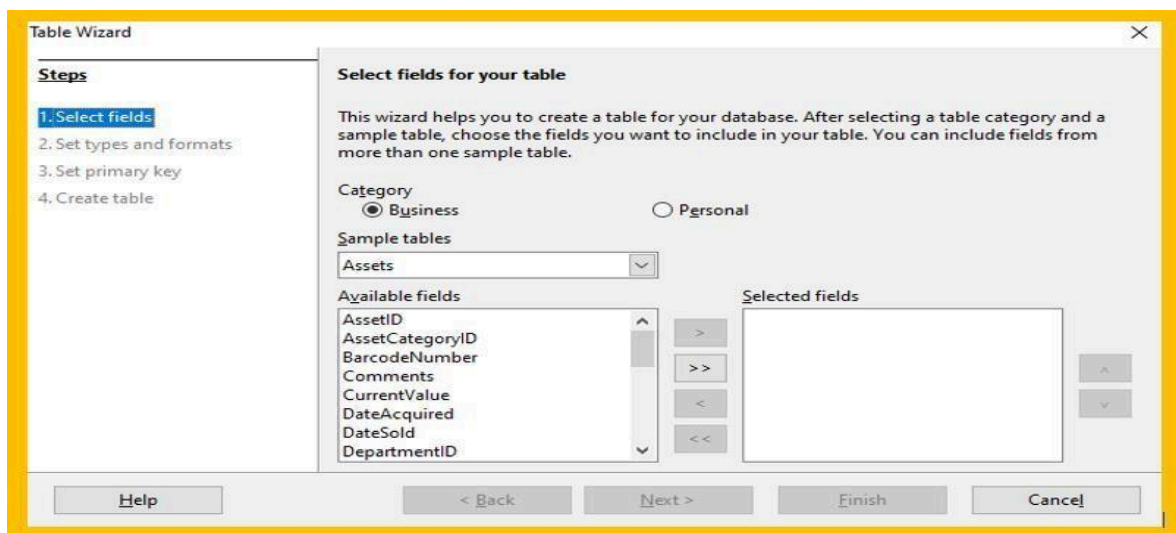
1. Click on Start □ All Programs □ Open Office 4.1.7 □ Open Office Base.
2. OO Base window will open with Database Wizard. Select or create the database to work upon it. I have selected existing database db1. Click on Finish button.



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.



5. 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.

Table Wizard

Steps

1. Select fields
2. Set types and formats
3. Set primary key
4. Create table

Select fields for your table

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.

Category

☒ Business ☐ Personal

Sample tables

Employees

Available fields

- Address
- BillingRate
- Birthdate
- CountryOrRegion
- Deductions
- DepartmentID
- EmailAddress
- EmployeeNumber

Selected fields

- EmployeeID
- FirstName
- LastName
- DateHired
- City
- Salary
- Department

Help < Back Next > Finish Cancel

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

Table Wizard

Steps

1. Select fields
2. Set types and formats
3. Set primary key
4. Create table

Set field types and formats

Selected fields

- EmployeeID
- FirstName
- LastName
- DateHired
- City
- Salary
- Department

Field information

Field name	EmployeeID
Field type	Integer [INTEGER]
AutoValue	No
Entry required	No
Length	10

Help < Back Next > Finish Cancel

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

The screenshot shows the 'Table Wizard' dialog box, specifically the 'Set primary key' step. The 'Steps' list on the left includes: 1. Select fields, 2. Set types and formats, 3. Set primary key (highlighted), and 4. Create table. The main area contains the following options:

- ☒ Create a primary key
 - ☐ Automatically add a primary key
 - ☐ Auto value
 - ☒ Use an existing field as a primary key
 - Fieldname: EmployeeID (selected in a dropdown menu)
 - ☐ Auto value
 - ☐ Define primary key as a combination of several fields
- Available fields: EmployeeID, FirstName, LastName, DateHired
- Primary key fields: (empty)

Buttons at the bottom: Help, < Back, Next > (highlighted), Finish, Cancel.

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.

The screenshot shows the 'Table Wizard' dialog box, specifically the 'Create table' step. The 'Steps' list on the left includes: 1. Select fields, 2. Set types and formats, 3. Set primary key, and 4. Create table (highlighted). The main area contains the following options:

- What do you want to name your table?
 - Employees (entered in the text box)
- 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

Buttons at the bottom: Help, < Back, Next > (disabled), Finish (highlighted), Cancel.

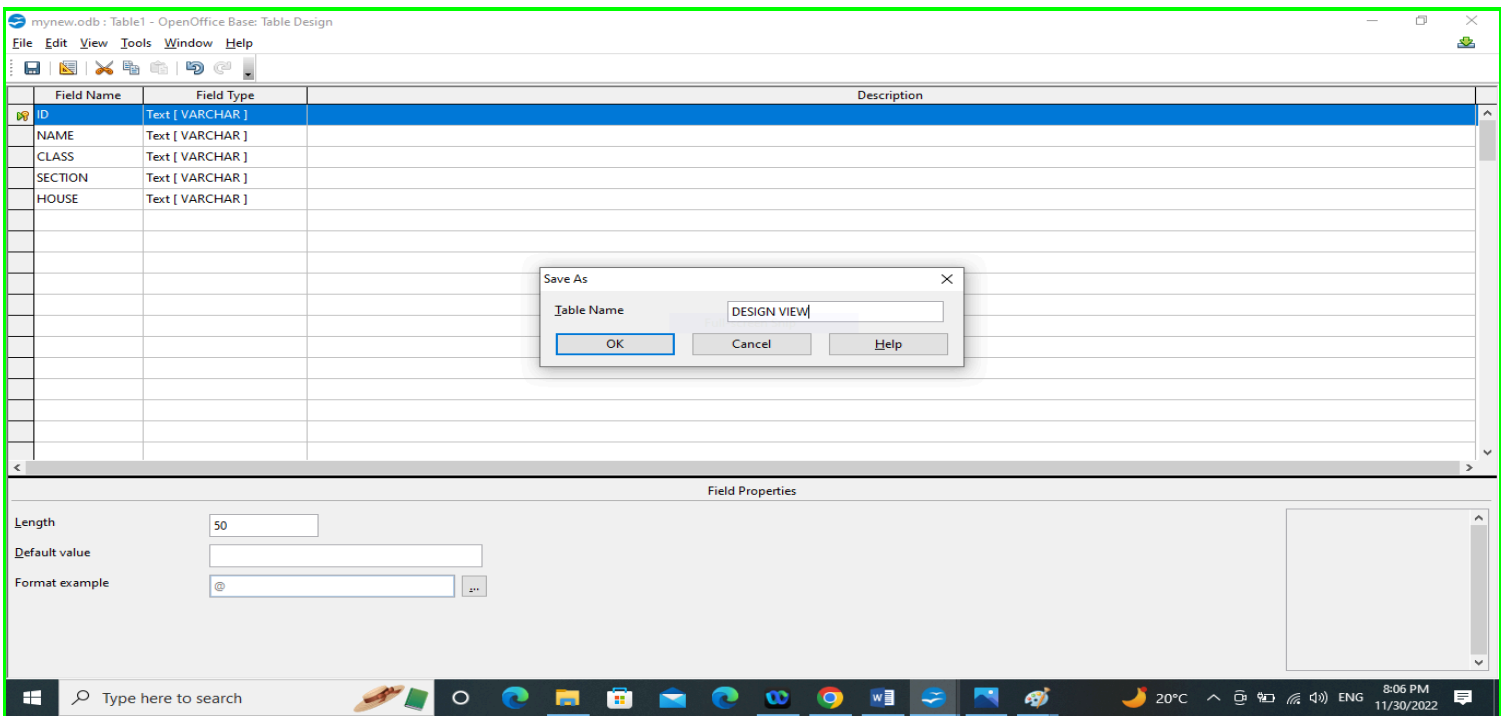
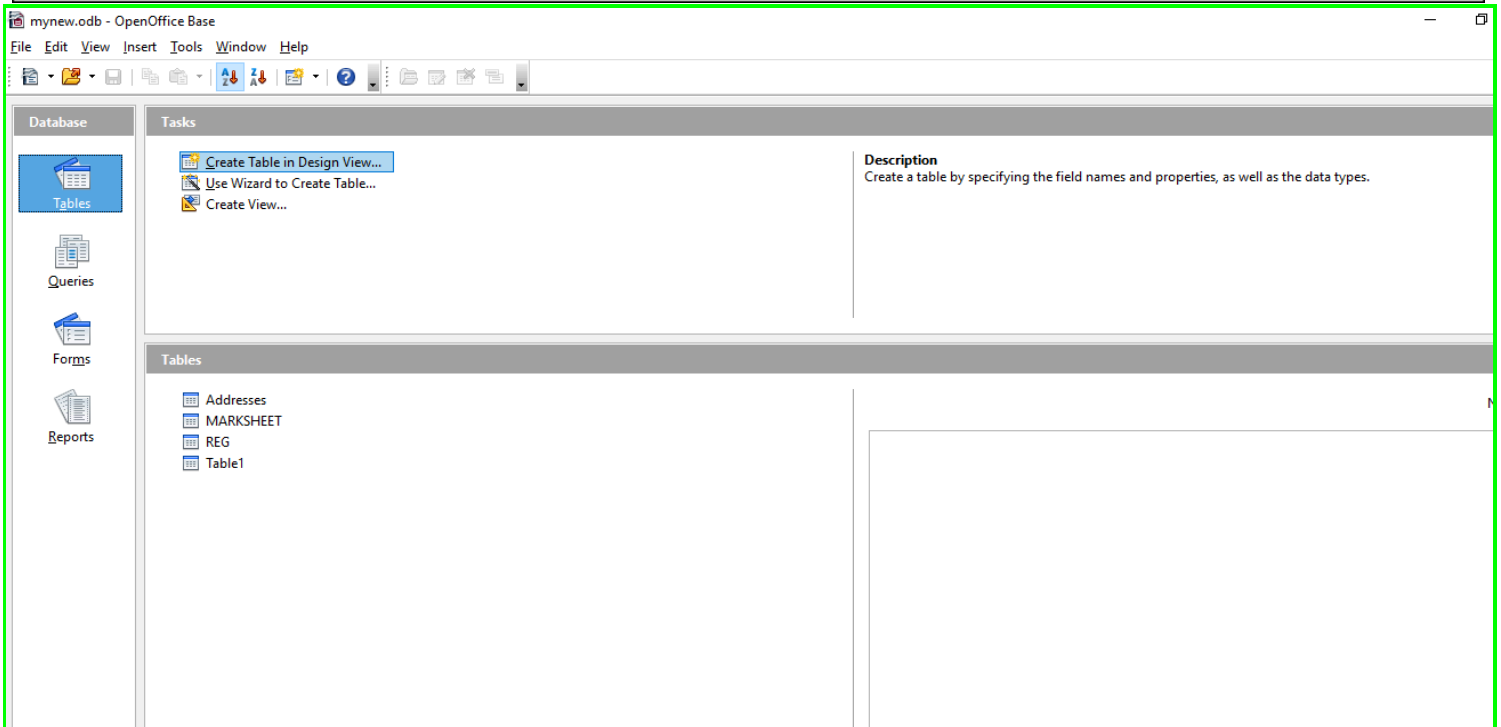
9. Insert data.

Learning Outcome – Create and edit tables using Design view

Assignment 2

Objective: Steps to create a table using table design view

Task: Create a table using design view



OUTPUT

DESIGN VIEW - mynew - OpenOffice Base: Table Data View

File Edit View Insert Tools Window Help

Full-screen Snip

	ID	NAME	CLASS	SECTION	HOUSE
1	RAVI RAJ	10	A	GREEN	

Record 1 of 1

Type here to search

20°C 8:07 PM 11/30/2022

Learning Outcome – Retrieve data using query

Assignment 3

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

- 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)
- Insert more 3 records in MARKSHEET using SQL mode.
- Display name, rollno, marks of 3 subjects, total and percentage using design view.

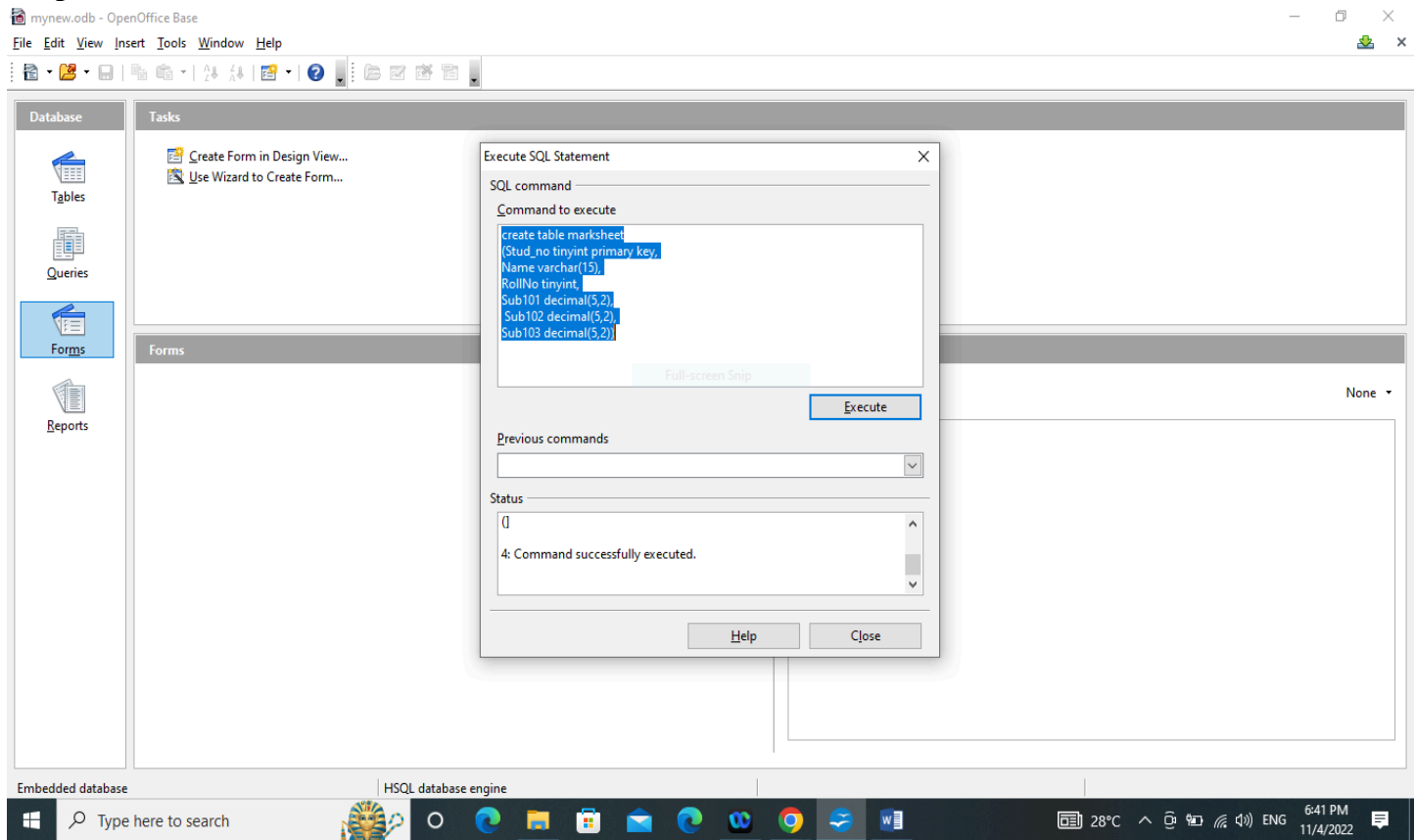
- Display the rollno, name and percentage whose percentage are more than 70 using design view.
- Display all the record in ascending order of names using design view.

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))
```

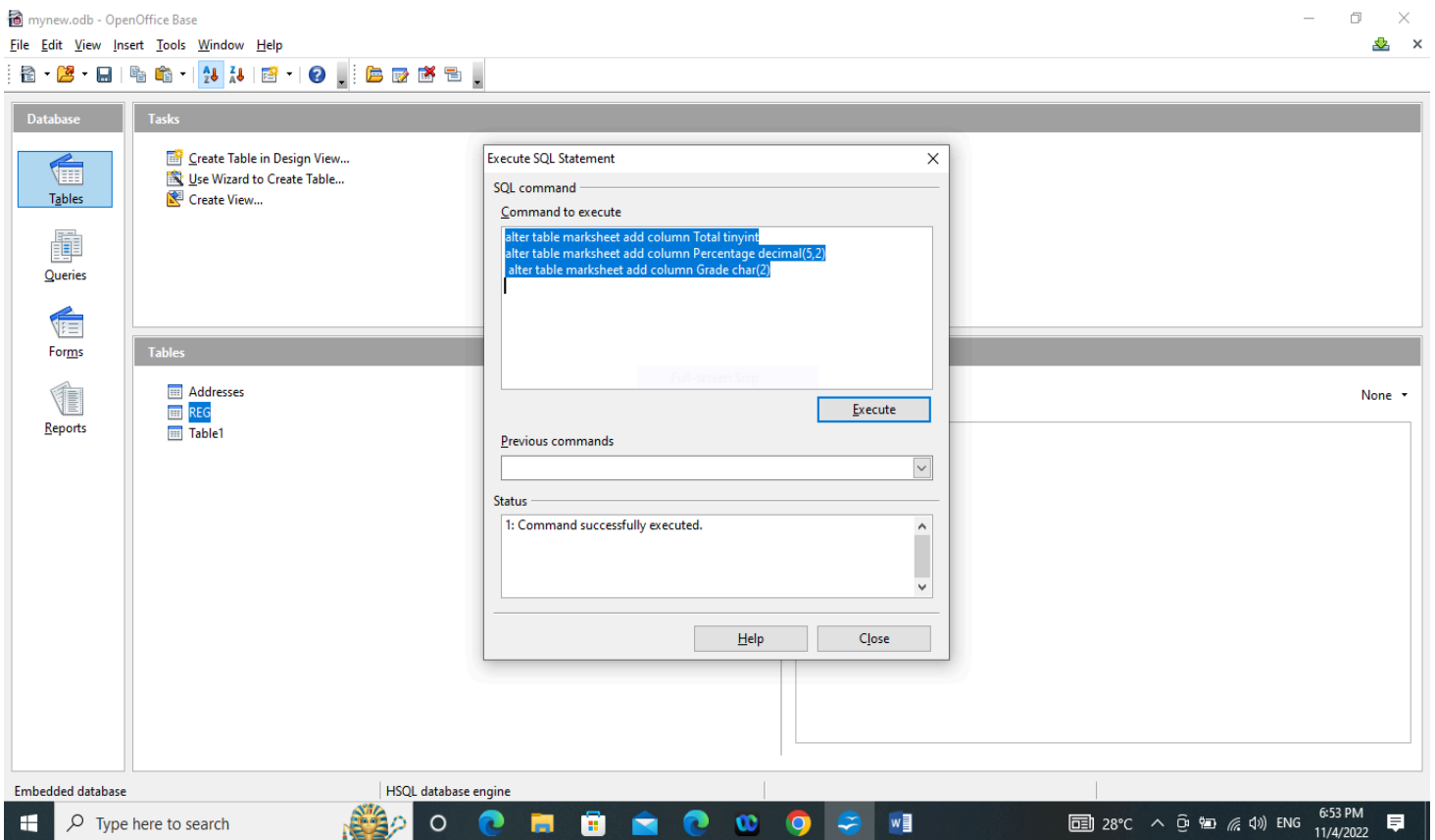
Output:



Queries

1. Add Columns

1. Add column Total □ alter table marksheet add column Total tinyint
2. Add column Percentage □ alter table marksheet add column Percentage decimal(5,2)
3. Add column grade □ alter table marksheet add column Grade char(2)



2. Insert records

1. insert into marksheet values (101, 'Sagar', 105, 27, 25, 28, 80 , 88 , 'B1')

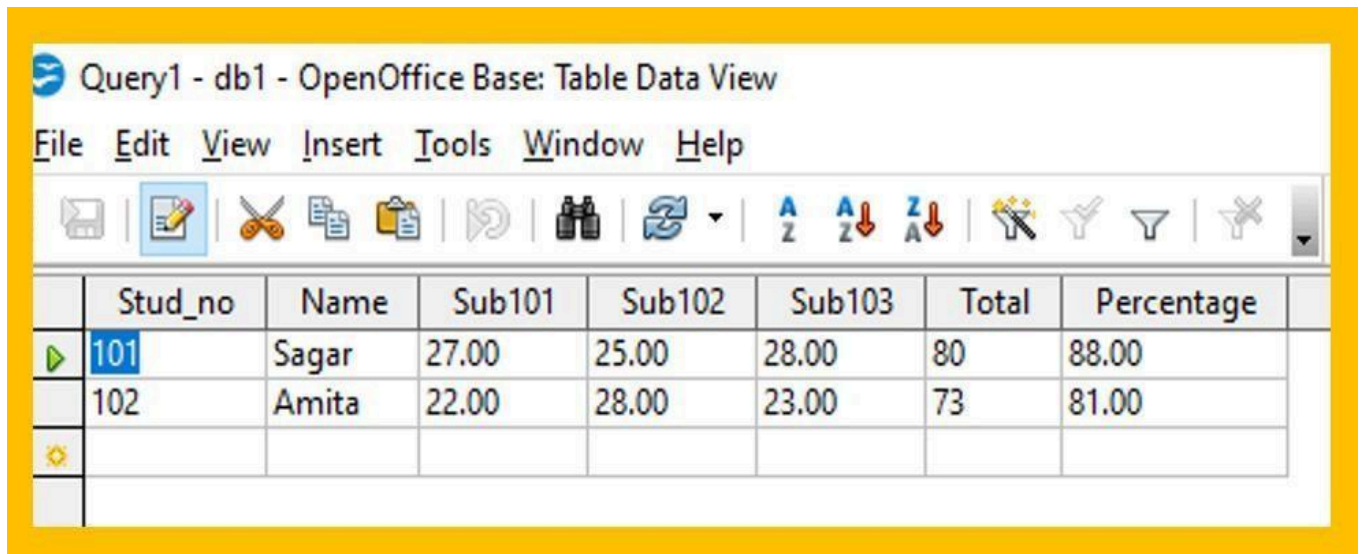
3. Steps to perform a query using design view

1. Click Queries □ 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.

Output



Query1 - db1 - OpenOffice Base: Table Data View

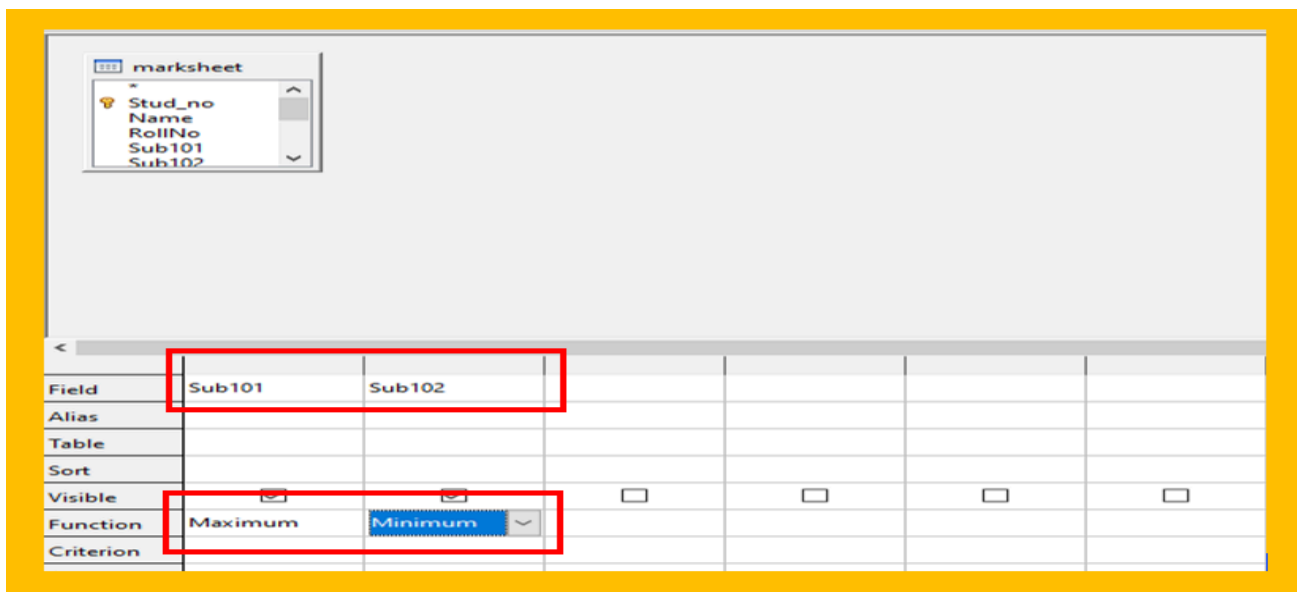
File Edit View Insert Tools Window Help

Icons: Save, New, Cut, Copy, Paste, Undo, Redo, Find, Sort Ascending, Sort Descending, Filter, etc.

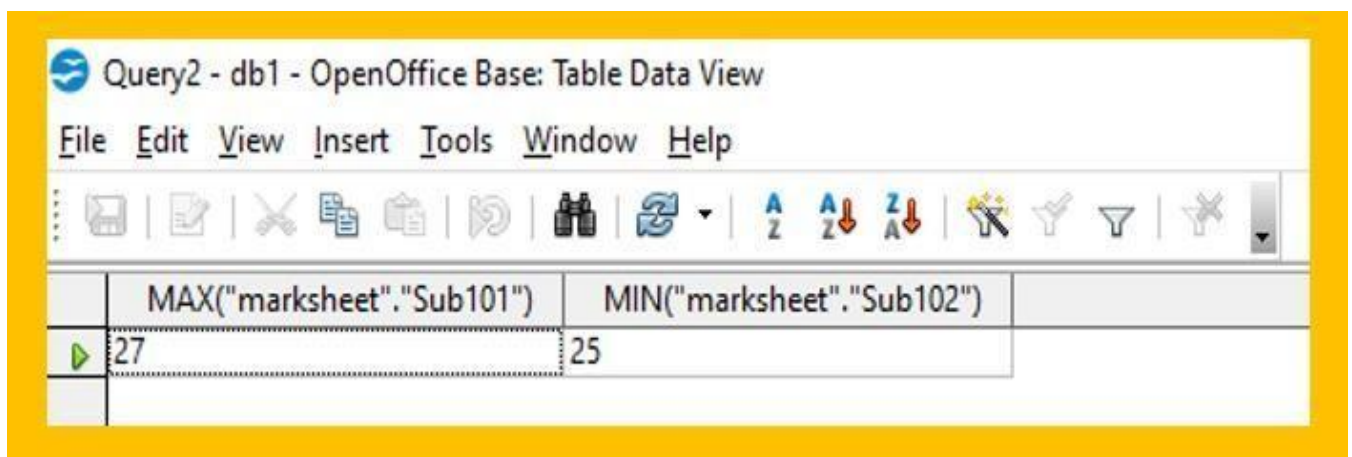
	Stud_no	Name	Sub101	Sub102	Sub103	Total	Percentage
▶	101	Sagar	27.00	25.00	28.00	80	88.00
	102	Amita	22.00	28.00	23.00	73	81.00
☀							

6. Display maximum marks and minimum marks for the fields given in the question, using design view.

1. Click Queries ▢ 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.



7. Display the rollno, name and percentage whose percentage are more than 70 using design view

1. Click Queries ▢ 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.

The screenshot shows the Query Design View for a query named 'Query3'. The 'marksheet' table is selected. The design grid is as follows:

Field	RollNo	Name	Percentage
Alias			
Table			
Sort			
Visible	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Function			
Criterion			>70

6. Save the query and check the result.

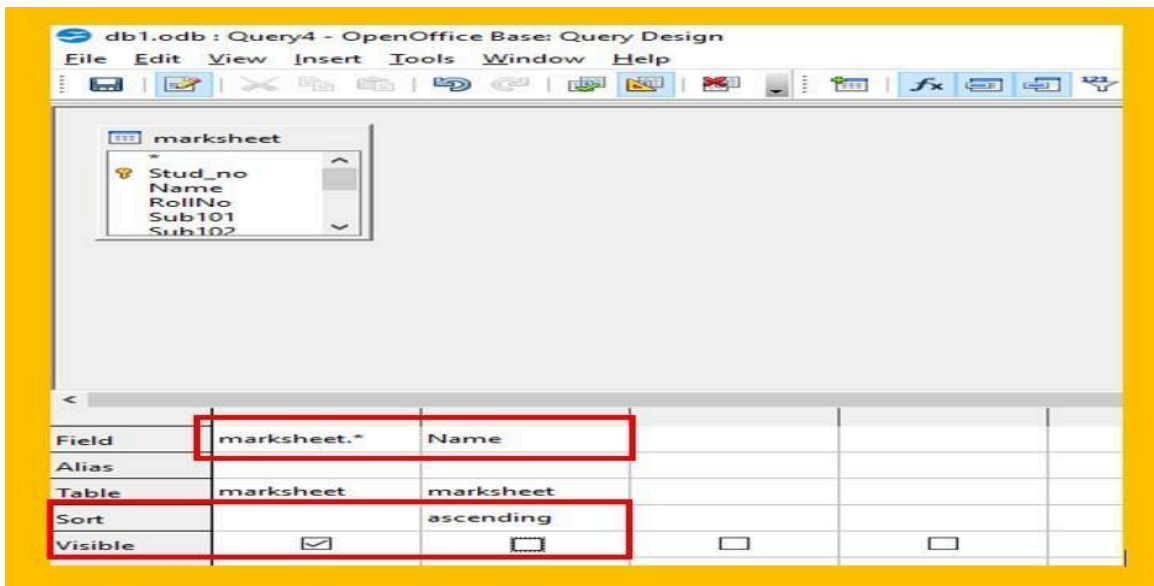
Output

The screenshot shows the 'Query3 - db1 - OpenOffice Base: Table Data View' window. The table displays the results of the query, showing RollNo, Name, and Percentage for students with a percentage greater than 70.

	RollNo	Name	Percentage
▶	105	Sagar	88.00
	103	Amita	81.00

7. Display all the record in ascending order of names using design view.

1. Click Queries ▢ Create Query in Design View....
2. The query design window will open.
3. Select the marksheet table and click on Add button.
4. Select marksheet.* and name in the column list.
5. Select sort ▢ ascending under name field.
6. Now click on Visible checkbox to hide the name column in result.



7. Save the query and check the result.

Output

The screenshot shows the 'Table Data View' of the query. The data is sorted by Name in ascending order. The 'Name' column is hidden, as indicated by the unchecked 'Visible' checkbox in the design view.

Stud_no	Name	RollNo	Sub101	Sub102	Sub103	Total	Percentage	Grade
102	Amita	103	22.00	28.00	23.00	73	81.00	A2
101	Sagar	105	27.00	25.00	28.00	80	88.00	A2

Learning Outcome – Create Forms and Reports using wizard

Assignment 4

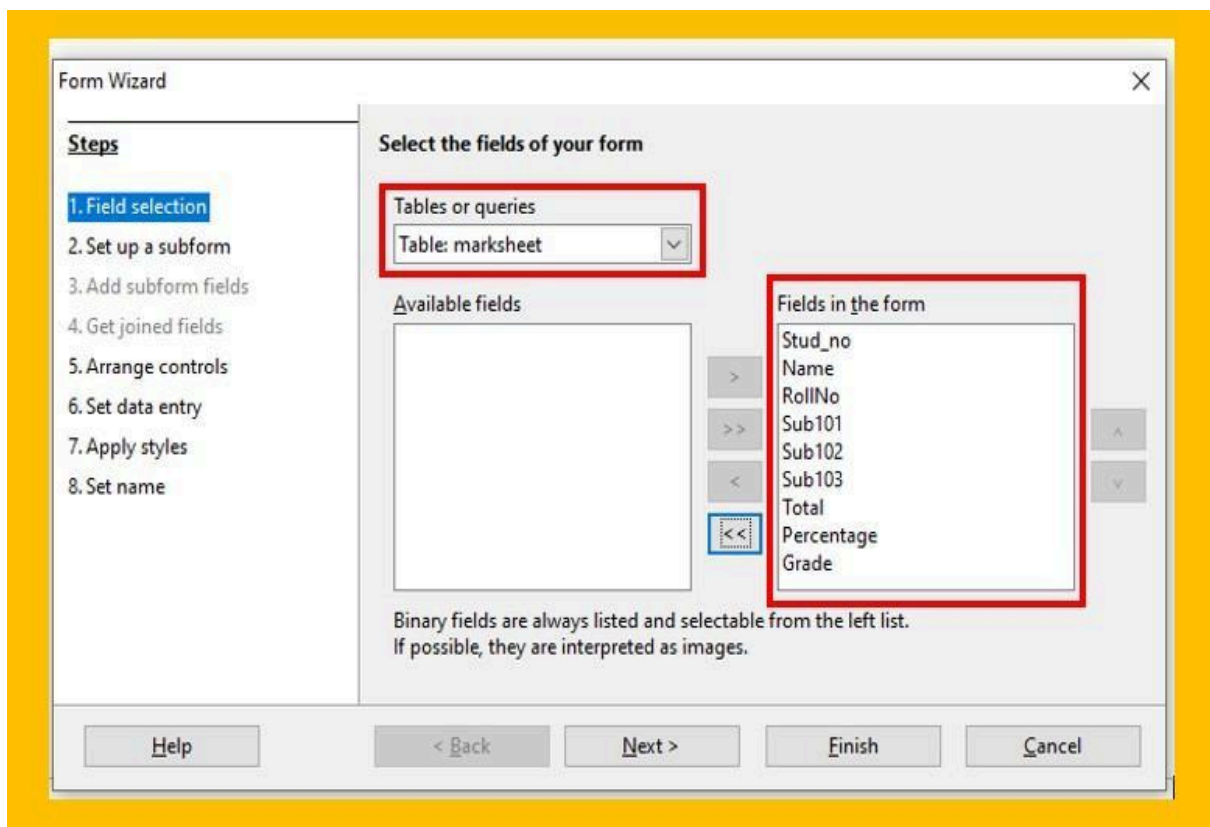
Objective: Creating form using wizard

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

Solution

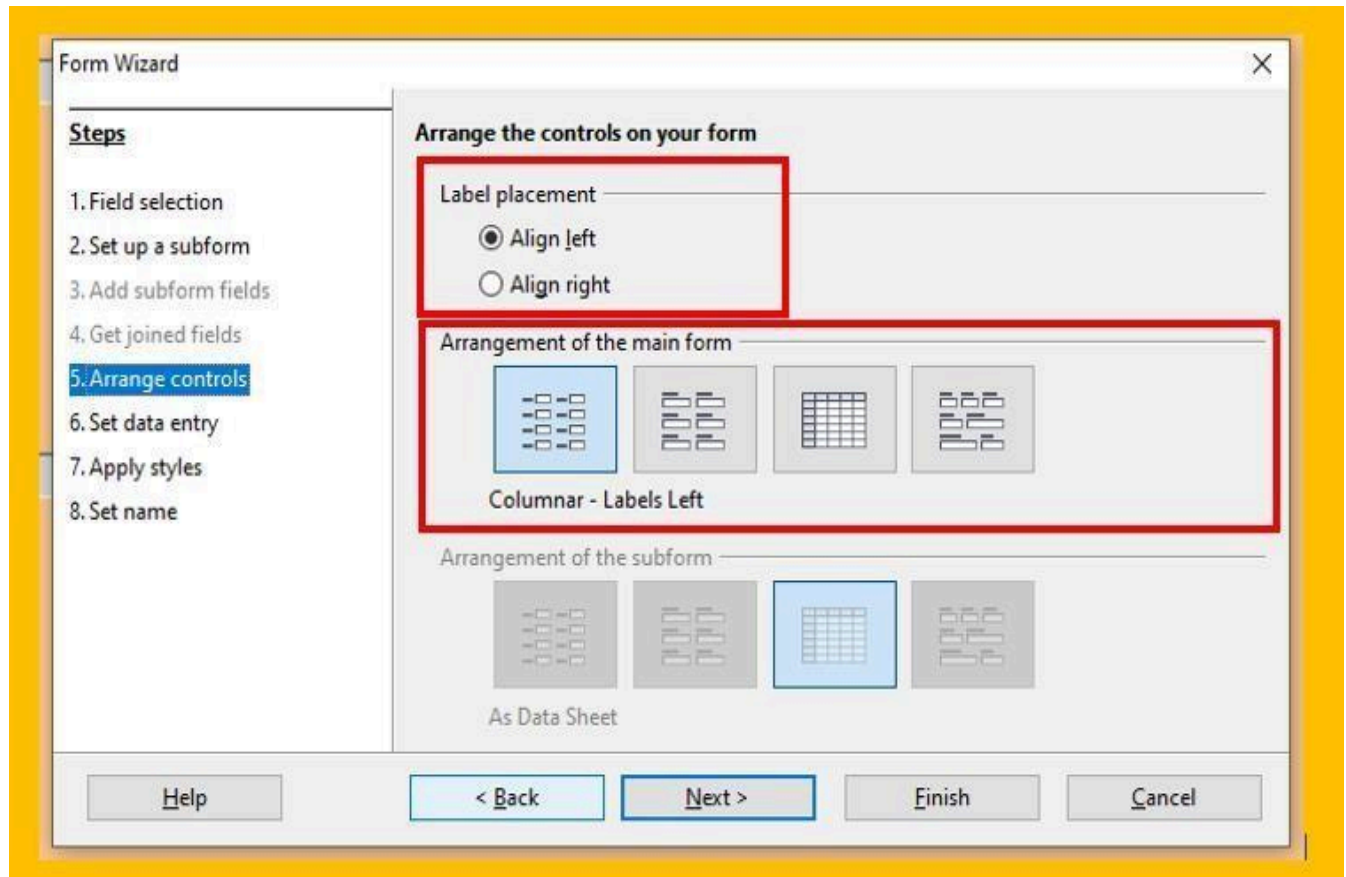
Steps to create a form using wizard

1. Click on Forms □ Use Wizard to Create Form...
2. A Form Wizard appears.

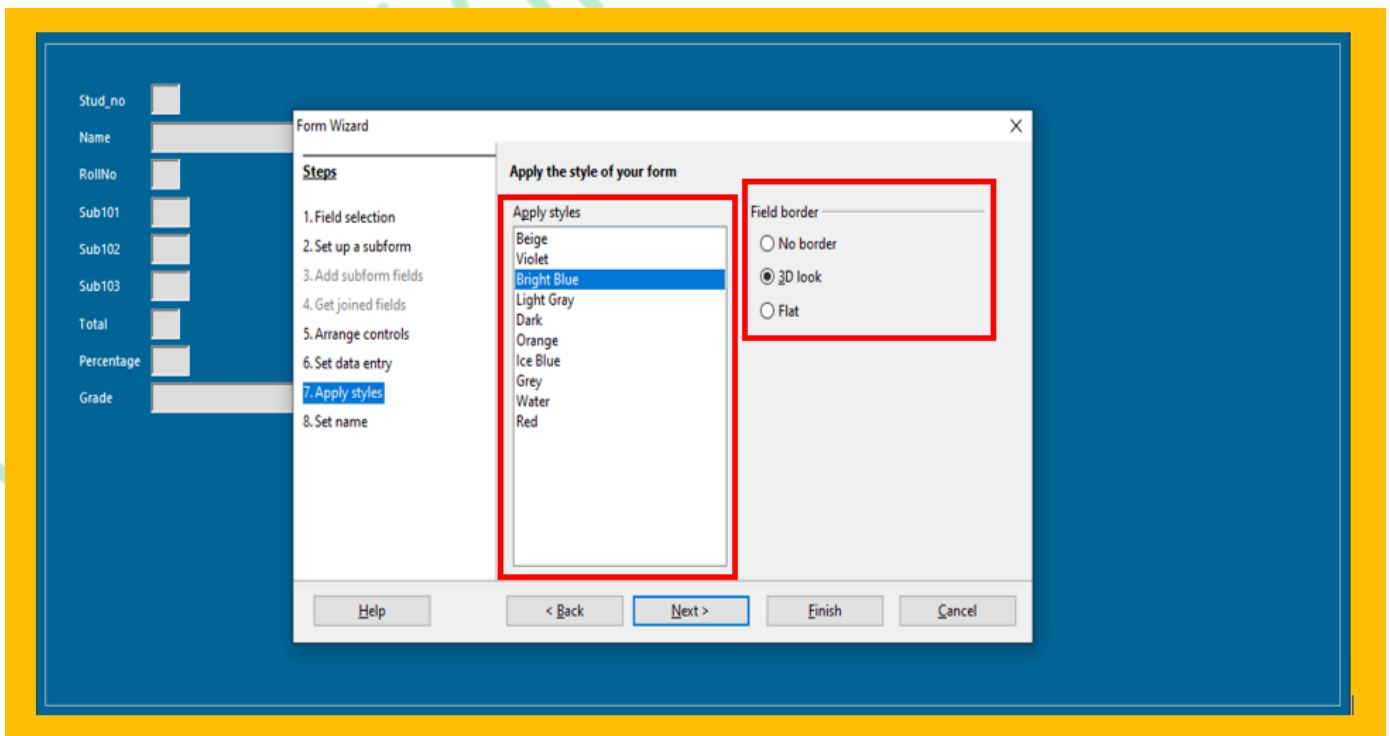


3. Select the table from Tables or Queries then add all the fields.
4. Click on Next button. Ignore step 3 and step 4.

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



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.

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

The image shows the 'Form Wizard' dialog box. On the left, a 'Steps' list includes: 1. Field selection, 2. Set up a subform, 3. Add subform fields, 4. Get joined fields, 5. Arrange controls, 6. Set data entry, 7. Apply styles, and 8. Set name (highlighted in blue). The main area is titled 'Set the name of the form'. It contains a text box labeled 'Name of the form' with the text 'MarkSheet_Form' entered. Below this is a section titled 'How do you want to proceed after creating the form?' with two radio buttons: 'Work with the form' (selected) and 'Modify the form'. At the bottom are buttons for 'Help', '< Back', 'Next >', 'Finish' (highlighted in blue), and 'Cancel'.

Assignment 5

Objective: Creating report using wizard

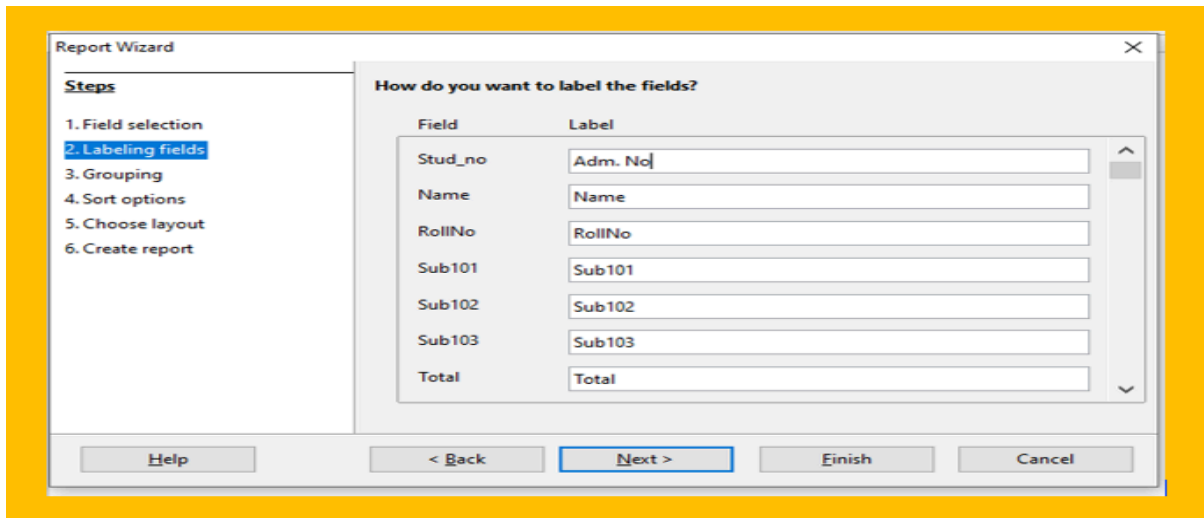
Task: Create table a report using wizard by selecting all the fields for the table - Marksheet

Solution

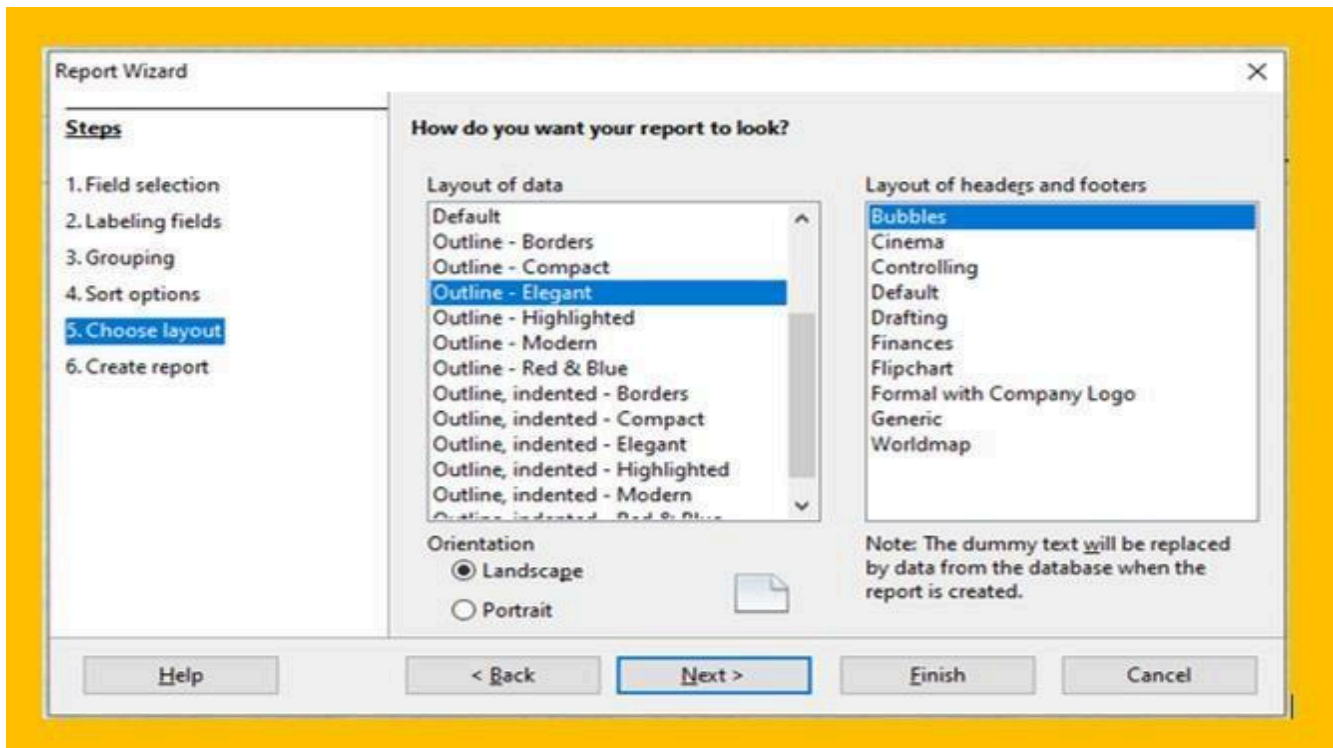
1. Click on Reports □ Use Wizard to Create report. The report wizard will open in the new window.
2. Select the table and add fields.

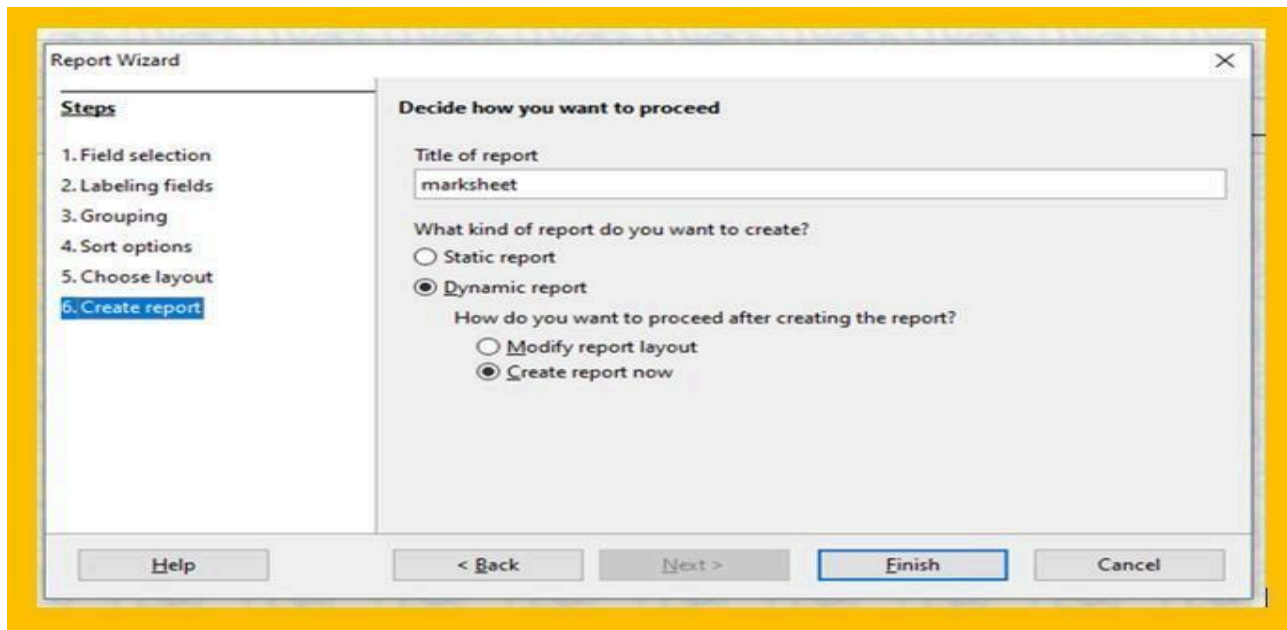
The image shows the 'Report Wizard' dialog box. On the left, a 'Steps' list includes: 1. Field selection (highlighted in blue), 2. Labeling fields, 3. Grouping, 4. Sort options, 5. Choose layout, and 6. Create report. The main area is titled 'Which fields do you want to have in your report?'. It contains a 'Tables or queries' dropdown menu with 'Table: marksheet' selected. Below this are two lists: 'Available fields' (empty) and 'Fields in report' (containing: Stud_no, Name, RollNo, Sub101, Sub102, Sub103, Total, Percentage, Grade). Between the lists are navigation buttons: '>', '>>', '<', and '<<' (highlighted in blue). At the bottom are buttons for 'Help', '< Back', 'Next >', 'Finish', and 'Cancel'.

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



- I have skipped grouping and sorting options by click on Next button.
- 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.





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

Output

<i>Adm. No</i>	<i>Name</i>	<i>RollNo</i>	<i>Sub101</i>	<i>Sub102</i>	<i>Sub103</i>	<i>Total</i>	<i>Percent- age</i>	<i>Grade</i>
101	Sagar	105	27	25	28	80	88	A2
102	Amita	103	22	28	23	73	81	A2

