

IT Term 2 Project

The Green Shelf



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Part A

A brief report describing the business idea and how the database supports green and entrepreneurial goals.

Business Idea: The Green Shelf – Eco-Friendly Lifestyle Products

The Green Shelf is an eco-friendly initiative designed to combine sustainability with practicality.

The business focuses on creating **useful, high-quality, and eco-conscious alternatives** to everyday products that often contribute to pollution and landfill waste.

The primary aim is not only to provide environmentally safe items but also to make sustainable living convenient, modern, and affordable for all age groups.

It includes **bamboo toothbrushes, self-watering bamboo planters, steel straw sets, upcycled denim pouch sets, organic cotton tote bags, coconut shell bowls, jute shopping bags, solar power banks, eco stationery kits, and compostable garbage bags**. Each product is chosen to address a specific environmental issue—plastic waste, textile disposal, single-use consumption, or high carbon footprint—while remaining practical and attractive for daily use.

What makes this business unique is its focus on **eco-design with purpose** — every product addresses a real issue such as plastic waste, water usage, or textile disposal. Unlike many sustainability projects that only aim to “go green,” The Green Shelf links design, convenience, and lifestyle appeal. Another unique feature is the emphasis on **locally sourced, handcrafted production**. By collaborating with small-scale artisans and reliable suppliers, the business supports local employment while minimizing the carbon footprint caused by transportation and mass manufacturing. This combination of eco-friendly materials, social responsibility, and smart design gives the brand a clear identity in the sustainable market.

Purpose of the Database

To manage the growing inventory and maintain smooth operations, a **LibreOffice Base database** was developed.

This system helps track the complete flow of products — from suppliers to customers — ensuring that data remains **organized, searchable, and up to date**.

The database consists of four interlinked tables:

- **Products Table:** Stores all product details such as stock availability, eco score, and production cost.
- **Suppliers Table:** Maintains supplier reliability, partnership details, and delivery timelines.
- **Customers Table:** Records customer feedback, preferences, and loyalty information.

- **Sales Table:** Keeps a record of every sale, helping monitor product performance and demand trends.
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How the Database Supports Green and Entrepreneurial Goals

1. **Eco-Efficiency:**

By tracking **stock levels and production costs**, the database prevents over-production and resource wastage. Products with lower stock are automatically identified, helping reorder materials responsibly.

2. **Entrepreneurial Decision-Making:**

Queries and reports generated from the database give quick insights — such as which products sell fastest or which suppliers are most reliable — enabling smarter business strategies.

3. **Transparency & Accountability:**

Every transaction and supplier partnership is recorded digitally, building trust with customers and demonstrating ethical business practices.

4. **Scalability:**

As the business grows, the database can easily accommodate new products, suppliers, and customers — supporting long-term entrepreneurial expansion without losing focus on sustainability.

The database integrates multiple sustainability-oriented fields to promote environmentally responsible business practices. Fields such as **Eco Score**, **Recycled Content (%)**, and **Carbon Saved (kg)** measure the overall environmental benefit of each product, while **Eco Category** and **Material Type** classify products according to their green characteristics, such as recycled, organic, or reusable. The **Supplier Eco Certification** and **Sustainability Rating** fields ensure that only verified and ethical suppliers are selected. These fields collectively allow The Green Shelf to monitor sustainability performance, identify high-impact eco-products, and maintain transparency across its supply chain — ensuring that every business decision supports both environmental conservation and long-term green entrepreneurship.

Conclusion

The *The Green Shelf Inventory Management System* is more than just a database — it's a digital reflection of a sustainable business vision.

It blends technology, innovation, and responsibility, proving that entrepreneurship can coexist with environmental care.

By efficiently managing eco-friendly products and minimizing waste, this project contributes to the broader goal of a cleaner, greener, and smarter future.

Part B

The LibreOffice database practical tasks including tables, forms, queries and report.

Tables

	Field Name	Field Type	Description
🔍	ProductID	Integer [INTEGER]	A unique number for each product
	Name	Text [VARCHAR]	Product name
	Stock	Integer [INTEGER]	Number of items available
	Recycled_Content_pct	Decimal [DECIMAL]	Percent of recycled material
	Eco_Category	Text [VARCHAR]	Type of sustainability
	Carbon_saved_kg	Decimal [DECIMAL]	Estimated carbon dioxide saved per product in kilograms
	Price	Number [NUMERIC]	Selling price per unit (in ₹)
	Material_Type	Text [VARCHAR]	Main material used
	SupplierID	Integer [INTEGER]	ID of the supplier of each product
	Demand_Level	Text [VARCHAR]	"High", "Medium", "Low", etc. based on sales trend
	Production_cost	Decimal [DECIMAL]	Cost to make or buy the product
	Profit_margin	Decimal [DECIMAL]	Calculated profit %
▶	Warranty_period	Text [VARCHAR]	"1 year", "6 months", etc.

	Field Name	Field Type	Description
🔍	SupplierID	Integer [INTEGER]	Unique ID for each supplier
	Name	Text [VARCHAR]	Supplier or company name
	Contact	Text [VARCHAR]	Mobile number or email id
	Location	Text [VARCHAR]	Supplier's city or country
	Eco_Certification	Text [VARCHAR]	Certification
	Sustainability_Rating	Decimal [DECIMAL]	Ratings for how sustainable the products are
	Material_Speciality	Text [VARCHAR]	What eco-materials they specialize in
	Delivery_Time	Number [NUMERIC]	Average days the supplier takes to deliver stocks
	Years_of_Partnership	Number [NUMERIC]	How long we've been working together
	Partnership_Level	Text [VARCHAR]	"Gold", "Silver", "Basic", etc.
	Last_Delivery_Date	Date [DATE]	Date of most recent delivery
	Reliability_Score	Integer [INTEGER]	Score based on how consistent and trustworthy they are
▶	Remarks	Text [VARCHAR]	Short note on supplier's performance or feedback

	Field Name	Field Type	Description
🔍	CustomerID	Integer [INTEGER]	Unique ID for each customer
	Name	Text [VARCHAR]	Full name
	Email	Text [VARCHAR]	Contact email
	Phone	Text [VARCHAR]	Contact number
	City	Text [VARCHAR]	City or region
	Preferred_Category	Text [VARCHAR]	Favourite product type
	Loyalty_Points	Integer [INTEGER]	Points for regular customers
	Last_Purchase_Date	Date [DATE]	When they last purchased something
	Total_Purchases	Number [NUMERIC]	Number of orders they've placed
	Sustainability_Score	Number [NUMERIC]	How eco-conscious the customer is (based on purchase patterns)
	Feedback_Rating	Decimal [DECIMAL]	Average rating (from surveys or satisfaction forms)
	Discount_Eligibility	Yes/No [BOOLEAN]	Whether they qualify for discounts or offers
	Referral_Source	Text [VARCHAR]	How they found our business - "Friend", "Social Media", etc.

	Field Name	Field Type	Description
🔍	SaleID	Integer [INTEGER]	Unique ID to each sale
	ProductID	Integer [INTEGER]	Unique ID for each product
	CustomerID	Integer [INTEGER]	Unique ID for each consumer
	Quantity	Number [NUMERIC]	Number of units sold
	Sale_Date	Date [DATE]	Date of sale
	Total_Amount	Decimal [DECIMAL]	Quantity * Product Price
	Payment_mode	Text [VARCHAR]	"Cash", "Online", "Card", etc.
	Deliver_Status	Text [VARCHAR]	"Pending", "Delivered", etc.
	Discount_Applied	Decimal [DECIMAL]	Discount given (in ₹ or %)
	Profit_Margin	Decimal [DECIMAL]	Profit earned on the sale
	Eco_Score	Integer [INTEGER]	Measures how eco-friendly the sold product combo is
	Consumer_Feedback	Text [VARCHAR]	Short note on satisfaction or rating
	Sales_Channel	Text [VARCHAR]	"Online store", "Pop-Up stall", "Social media", etc.

Products

Output (with entered data)

Product...	Name	Stock	Recycled...	Eco_Category	Carb...	Price	Material_Type	Supp...	Demand_Level	Produc...	Profit_ma...	Warranty_pe...
1	Bamboo Toothbrush	20	90	Reusable	12	49	Bamboo	1	High	25	50	6 months
2	Self-Watering Bamboo Planter	3	85	Natural	25	299	Bamboo	7	High	180	40	1 year
3	Steel Straw Set	15	80	Reusable	15	129	Stainless Steel	4	High	70	46	1 year
4	Upcycled Denim Pouch Set	4	95	Recycled	10	159	Denim Fabric	9	High	80	50	None
5	Organic Cotton Tote Bag	20	100	Organic	14	149	Cotton	2	Medium	80	46	1 year
6	Coconut Shell Bowl Set	25	90	Natural	20	199	Coconut Shell	3	Medium	100	50	None
7	Jute Shopping Bag	40	100	Reusable	20	99	Jute	5	High	55	45	1 year
8	Solar Power Bank	15	60	Solar	50	799	Plastic & Solar Cell	8	High	500	38	1 year
9	Eco Stationary Kit	25	90	Recycled	8	179	Mixed (bamboo/paper)	2	Medium	90	50	None
10	Compostable Garbage Bags	35	100	Biodegradable	18	129	Cornstarch	6	High	60	53	None

Suppliers

S...	Name	Contact	Location	Eco_Certification	Sus...	Material_Specialty	Del...	Yea...	Partnershi...	Last_Deliver...	Re...	Remarks
1	Green Roots Pvt. Ltd.	green@gmail.com	Pune	FSC	10	Bamboo Products	3	2	Gold	25/10/10	9	Always on time
2	Eco Earth Traders	ecoeearth@gmail.com	Delhi	Organic Certified	10	Paper and Fabric	5	3	Gold	25/10/08	9	Reliable supplier
3	Pure Planet Suppliers	6789012345	Mumbai	Fair Trade	9	Cotton and Coconut	4	4	Platinum	25/10/12	8	Excellent quality
4	GreenEra Ventures	green.era@gmail.com	Chennai	Recycled Mark	7	Steel and Solar	6	1	Silver	25/10/15	7	Slight delivery delay
5	EcoLeaf Exports	exports@ecoleaf.com	Hyderabad	Carbon Neutral	8	Jute and Bioplastics	5	2	Bronze	25/10/05	8	Moderate delivery speed
6	TerraCraft Innovations	7654321098	Ahmedabad	Zero Waste Certif	9	Compostable Materials	4	2	Gold	25/10/09	9	Quick delivery
7	Bamboo and Beyond	8798798798	Nagpur	FSC	10	Bamboo Furnitures	3	5	Platinum	25/10/14	10	Top-Rated Supplier
8	Solaris Tech Solutions	tech@solaris.com	Bengaluru	Green Energy Cer	8	Solar Devices and Panels	7	3	Gold	25/10/11	8	Innovative Tech
9	ReEarth Manufacturers	re.earth@gmail.com	Jaipur	Recycled	7	Uncycled Fabrics	6	2	Bronze	25/10/07	8	Consistent service
10	EcoNest Creations	9900990099	Indore	Eco Safe Label	9	Organic Homeware	4	3	Gold	25/10/13	9	Less required

Customers

Custom...	Name	Email	Phone	City	Preferred_Ca...	Loyal...	Last_Purchase_...	Total...	Sustai...	Feedb...	Discount...	Referral_Source
1	Aarav Mehta	aarav@gmail.com	9123456789	Mumbai	Reusable	120	12/10/25	8	9	4	<input checked="" type="checkbox"/>	Social Meda
2	Diya Sharma	diya1s@gmail.com	9876543210	Delhi	Organic	80	09/10/25	5	8	4	<input checked="" type="checkbox"/>	Website
3	Rohan Patel	rohan.patel@gmail.com	9988776655	Ahmedabad	Recycled	200	20/10/25	11	10	5	<input checked="" type="checkbox"/>	Friend
4	Shreya Singh	shreya4@gmail.com	9090909090	Patna	Reusable	60	07/10/25	6	7	5	<input type="checkbox"/>	Eco Fair
5	Arjun Nair	arjun.nair@gmail.com	9345678912	Kochi	Organic	100	15/10/25	4	8	3	<input checked="" type="checkbox"/>	Friend
6	Ishita Roy	ishita@gmail.com	9987654321	Kolkata	Recycled	70	10/10/25	3	7	3	<input checked="" type="checkbox"/>	Website
7	Advait Rao	advait7@gmail.com	9182736455	Pune	Reusable	150	06/10/25	9	9	5	<input type="checkbox"/>	Social Media
8	Meera Das	meera@gmail.com	8585858585	Bengaluru	Organic	50	18/10/25	7	8	4	<input type="checkbox"/>	Friend
9	Reyansh Kapoor	reyanshkapoor@gmail.com	8765432109	Delhi	Recycled	90	17/10/25	5	8	4	<input checked="" type="checkbox"/>	Eco Fair
10	Aanya Joshi	aanya10@gmail.com	9010101099	Surat	Recycled	110	06/10/25	10	10	5	<input checked="" type="checkbox"/>	Webiste

Sales (updated with 11th sales entry through the form)

SaleID	ProductID	CustomerID	Quantity	Sale_Date	Total_Amount	Payment_m...	Deliver_Status	Discount...	Profit_...	Eco_Sc...	Consumer_Feedback	Sales_Channel
1	3	7	1	07/10/25	129	UPI	Delivered	0	46	9	Nice steel quality!	Website
2	4	6	2	07/10/25	198	Cash	Delivered	0	45	10	Good pouches	Eco Fair
3	5	5	3	08/10/25	180	Cash	Delivered	5	50	9	Great Brush!	Website
4	7	3	1	19/10/25	119	UPI	Delivered	0	54	9	Great Tote!	Eco Fair
5	8	2	1	10/10/25	349	UPI	Delivered	0	40	8	Very eco friendly!	Website
6	9	1	2	11/10/25	78	Card	Delivered	5	49	7	Strong and durable!	Website
7	10	4	1	12/10/25	149	UPI	Pending	0	46	9	Waiting for delivery.	Social Media
8	6	8	1	13/10/25	79	Card	Pending	10	43	8	Online ordering process is very easy.	Website
9	2	10	1	15/10/25	89	UPI	Delivered	10	55	7	Unique product!	Website
10	1	9	2	17/10/25	100	Cash	Delivered	0	50	8	Nice paper quality!	Eco Fair
11	8	7	1	17/10/25	349	UPI	Pending	0	40	9	A very innovative product, eager to see it!	Social Media

Tables

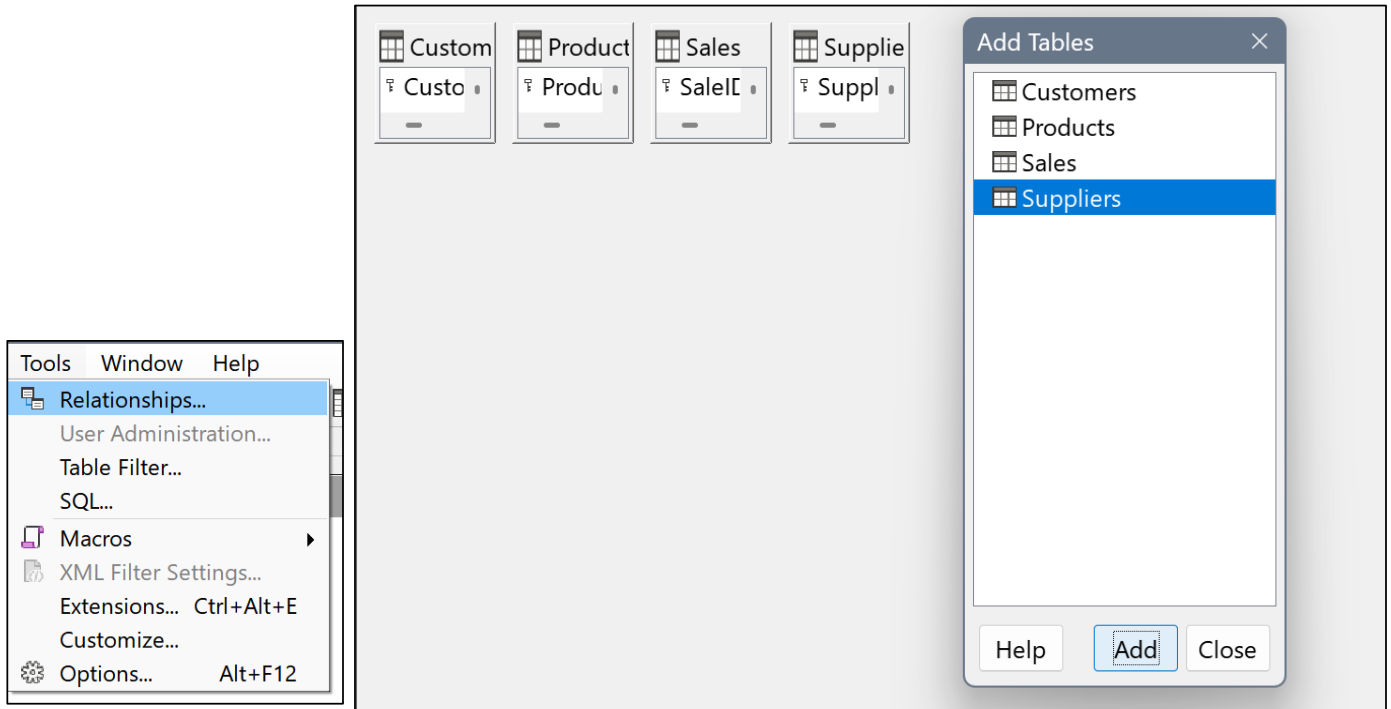
Customers

Products

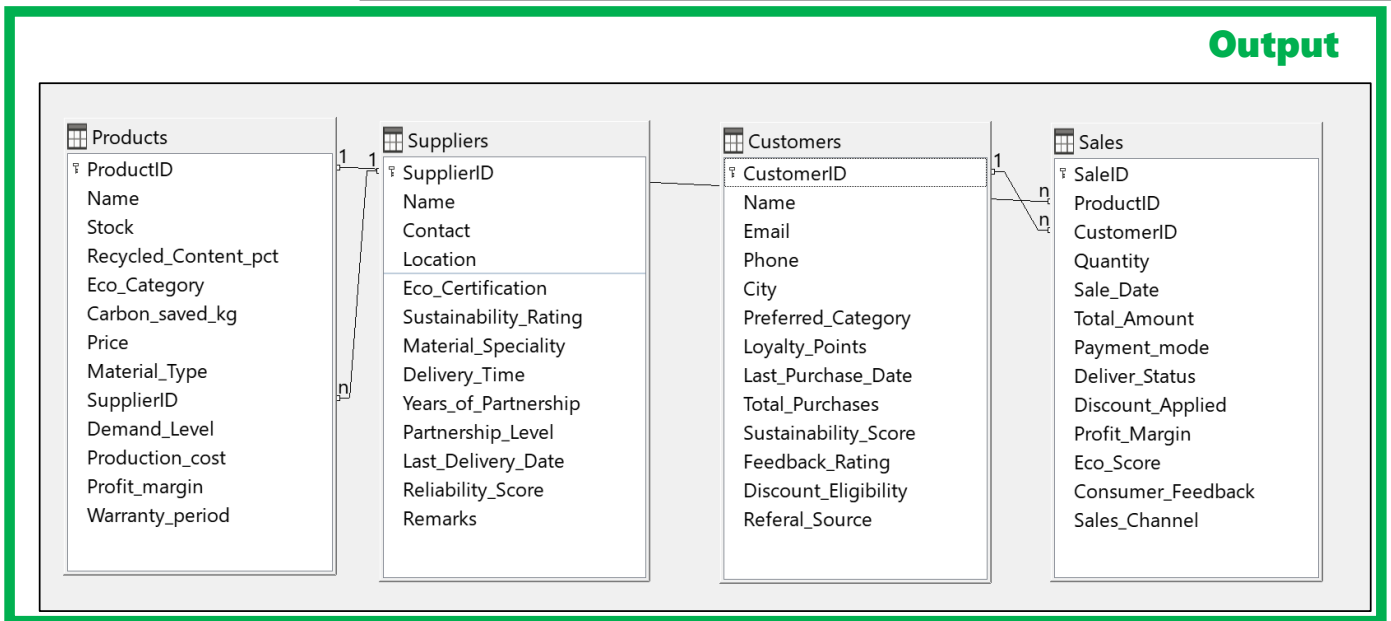
Sales

Suppliers

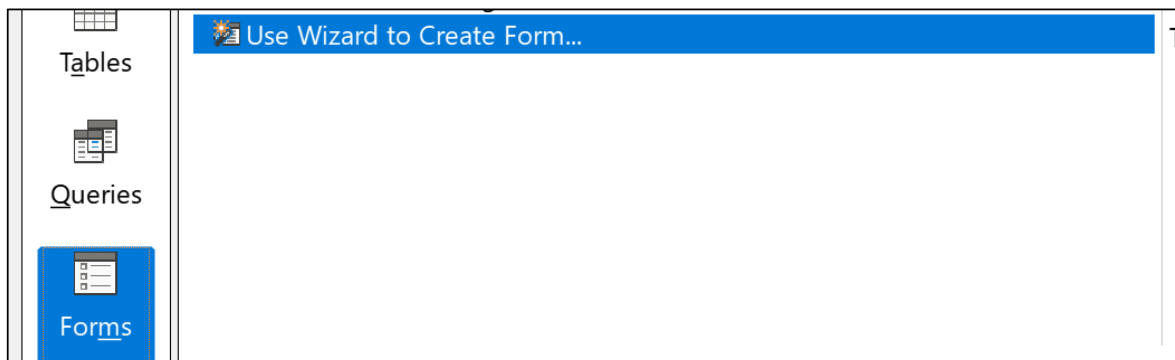
Relationships



Output



Forms



Form Wizard

Steps

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
8. Set name

Set the name of the form

Name of the form
Sales_Data_Entry

How do you want to proceed after creating the form?

Work with the form

Modify the form

Help < Back Next > Finish Cancel

SaleID	11
ProductID	8
CustomerID	7
Quantity	1
Sale_Date	17/10/25
Total_Amount	349
Payment_mode	UPI
Deliver_Status	Pending
Discount_Applied	0
Profit_Margin	40
Eco_Score	9
Consumer_Feedback	A very innovative product, eager to see it!
Sales_Channel	Social Media

Forms

 Sales_Data_Entry

Entering data of 11th sale through the form



Output

SaleID	ProductID	CustomerID	Quantity	Sale_Date	Total_Amount	Payment_mode	Deliver_Status	Discount_Applied	Profit_Margin	Eco_Score	Consumer_Feedback	Sales_Channel
11	8	7	1	17/10/25	349	UPI	Pending	0	40	9	A very innovative product, eager to see it!	Social Media

Queries

Use Wizard to Create Query...
SQL Create Query in SQL View...

Tables

Queries

Query Wizard

Steps

1. Field selection
2. Sorting order
3. Search conditions
4. Detail or summary
5. Grouping
6. Grouping conditions
7. Aliases
- 8. Overview**

Check the overview and decide how to proceed

Name of the query:

How do you want to proceed after creating the query?

Display Query
 Modify Query

Overview

Material_Type (Products.Material_Type), SupplierID (Products.SupplierID), Demand_Level (Products.Demand_Level), Production_cost (Products.Production_cost), Profit_margin (Products.Profit_margin), Warranty_period (Products.Warranty_period)

Sorting order: ProductID (ASC)

Search conditions: Stock is smaller than 5

No Groups were assigned.


No grouping conditions were assigned.

Help < Back Next > Finish Cancel

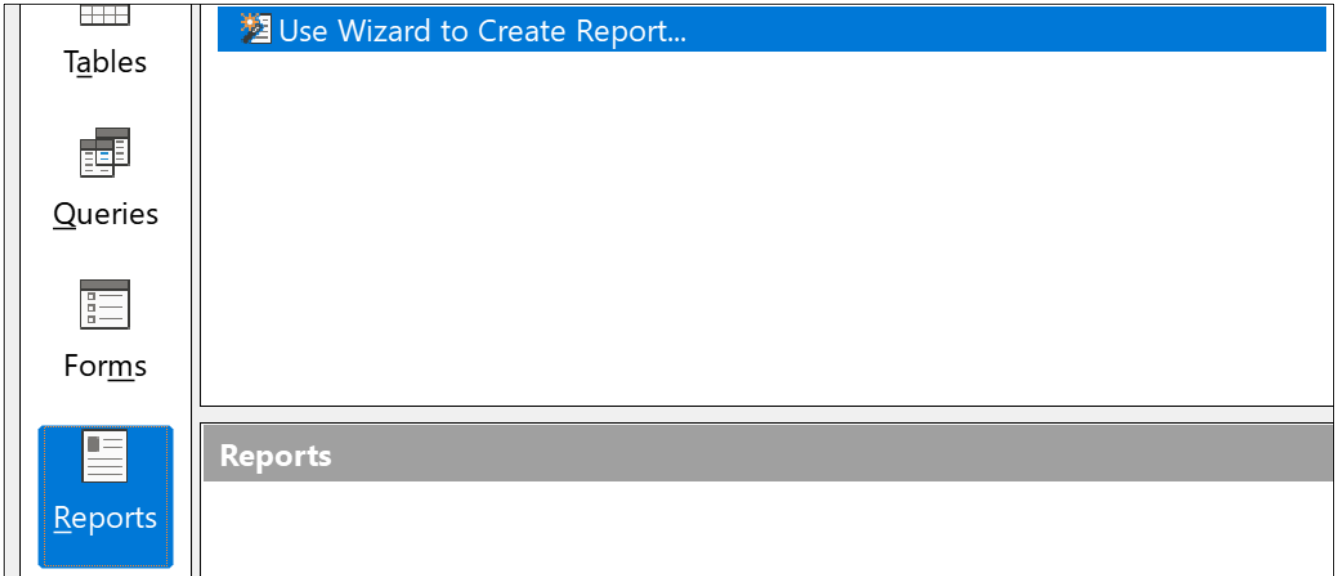
ProductID	Name	Stock	Recycled_Content...	Eco_Category	Carbon_saved_kg	Price	Mate
2	Self-Watering Bamboo Planter	3	85	Natural	25	299	Bamboo
4	Upcycled Denim Pouch Set	4	95	Recycled	10	159	Denim Fa

Output

Queries

 Stock_Check

Reports



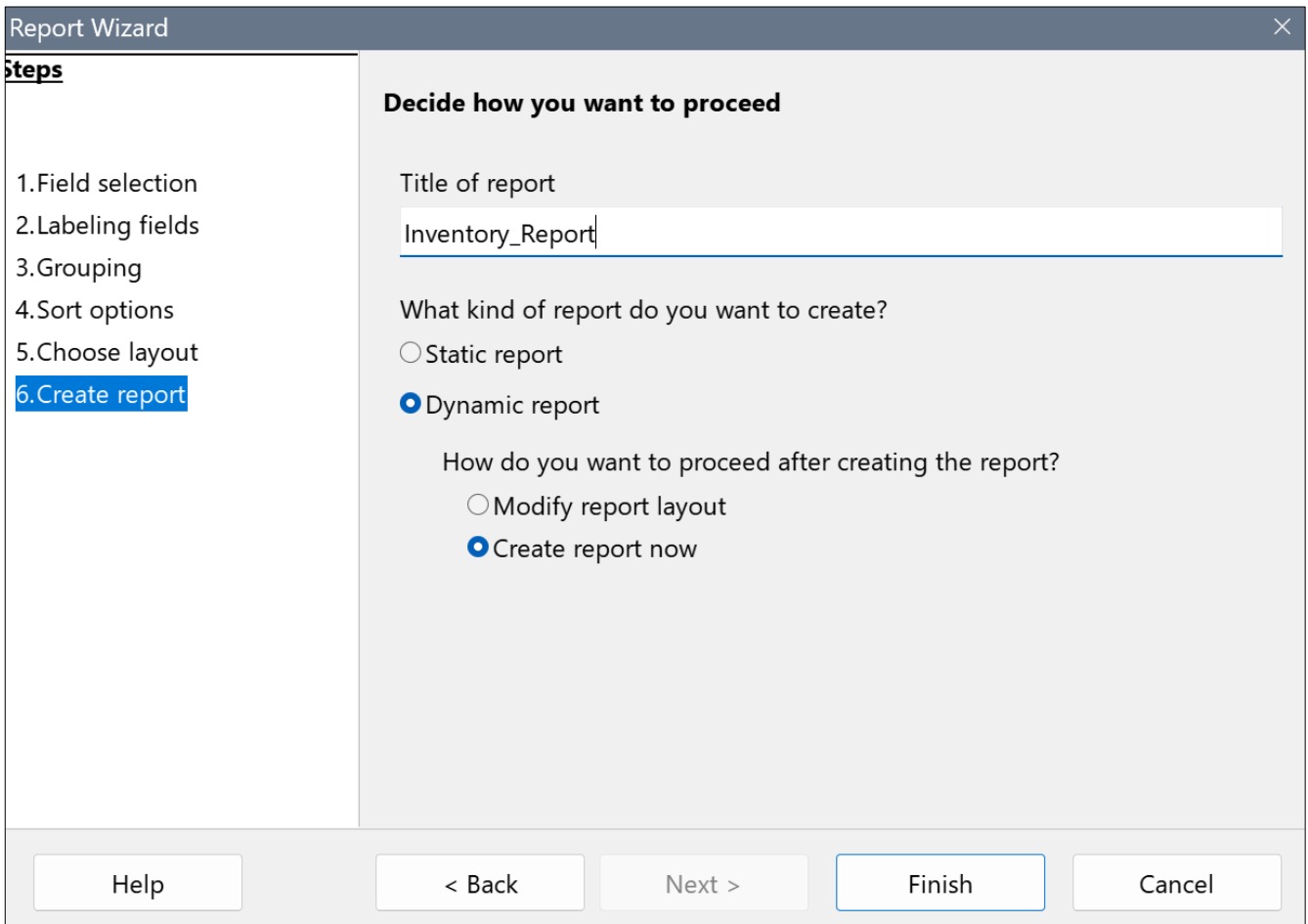
Use Wizard to Create Report...

Tables

Queries

Forms

Reports



Report Wizard

Steps

1. Field selection
2. Labeling fields
3. Grouping
4. Sort options
5. Choose layout
6. Create report

Decide how you want to proceed

Title of report
Inventory_Report

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 < Back Next > Finish Cancel



Reports

Inventory_Report

Output

LibreOffice
Default Report
Output

Product ID 1	Product Name Bamboo Toothbrush	Current Stock 20	Unit Cost 25
Product ID 2	Product Name Self-Watering	Current Stock ▶ 3	Unit Cost 180
Product ID 3	Product Name Steel Straw Set	Current Stock 15	Unit Cost 70
Product ID 4	Product Name Upcycled Denim	Current Stock ▶ 4	Unit Cost 80
Product ID 5	Product Name Organic Cotton Tote	Current Stock ▶ 20	Unit Cost 80
Product ID 6	Product Name Coconut Shell Bowl	Current Stock ▶ 25	Unit Cost 100
Product ID 7	Product Name Jute Shopping Bag	Current Stock 40	Unit Cost 55
Product ID 8	Product Name Solar Power Bank	Current Stock 15	Unit Cost 500
Product ID 9	Product Name Eco Stationary Kit	Current Stock 25	Unit Cost 90
Product ID 10	Product Name Compostable	Current Stock ▶ 35	Unit Cost 60

Product ID	Product Name	Current Stock	Unit Cost
1	Bamboo Toothbrush	20	25
Product ID	Product Name	Current Stock	Unit Cost
2	Self-Watering Bamboo Planter	3	180
Product ID	Product Name	Current Stock	Unit Cost
3	Steel Straw Set	15	70
Product ID	Product Name	Current Stock	Unit Cost
4	Upcycled Denim Pouch Set	4	80
Product ID	Product Name	Current Stock	Unit Cost
5	Organic Cotton Tote Bag	20	80
Product ID	Product Name	Current Stock	Unit Cost
6	Coconut Shell Bowl Set	25	100
Product ID	Product Name	Current Stock	Unit Cost
7	Jute Shopping Bag	40	55
Product ID	Product Name	Current Stock	Unit Cost
8	Solar Power Bank	15	500
Product ID	Product Name	Current Stock	Unit Cost
9	Eco Stationary Kit	25	90
Product ID	Product Name	Current Stock	Unit Cost
10	Compostable Garbage Bags	35	60

Edited Report