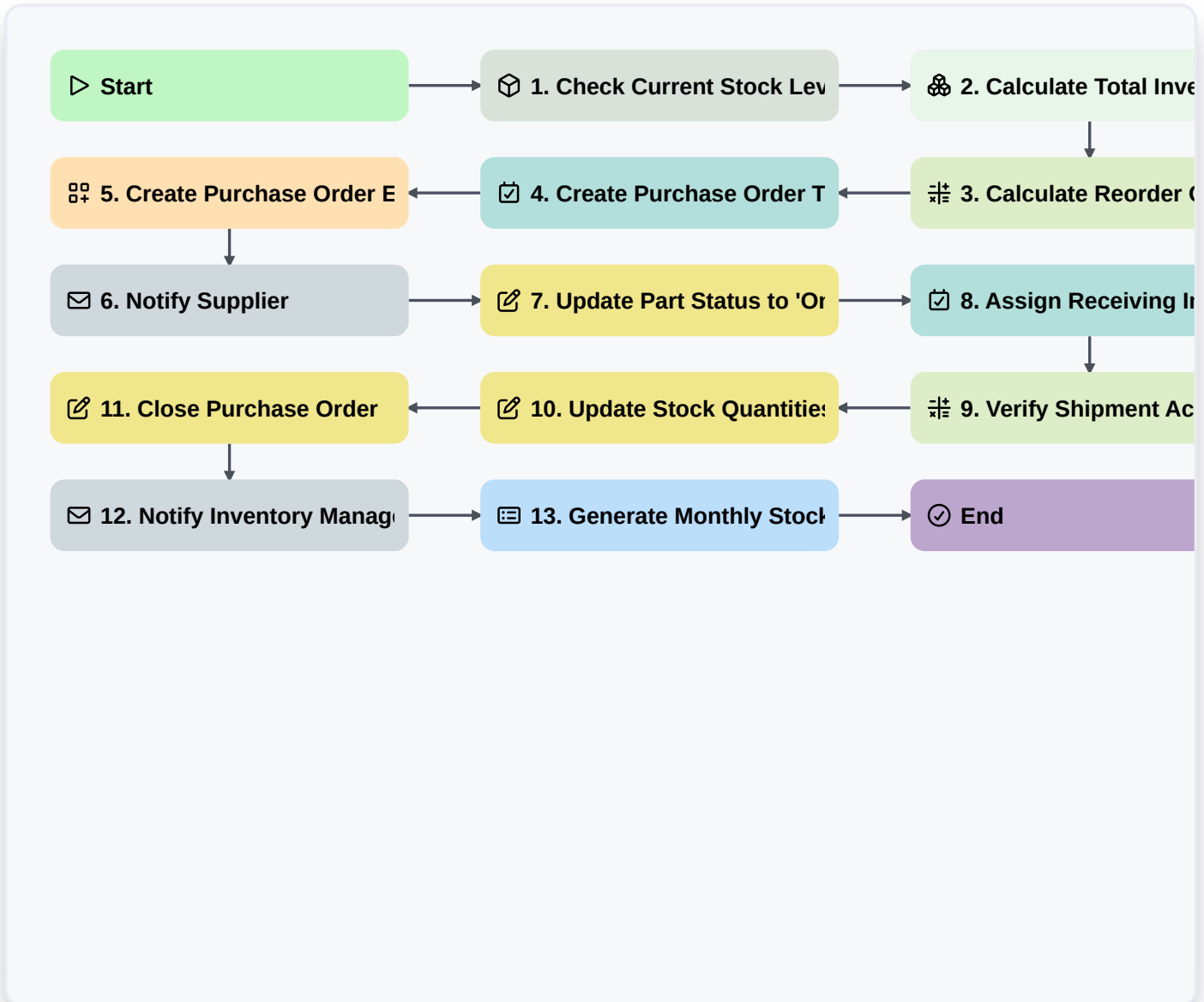


Spare Parts Inventory Management Workflow



▷ Start

Start of the Workflow/Process.

📦 1. Check Current Stock Levels

Retrieve all inventory entries where stock quantity is below the predefined reorder point.

🧮 2. Calculate Total Inventory Value

Sum the (unit_price * quantity) for all retrieved low-stock entries to determine budget requirements.

📏 3. Calculate Reorder Quantity

Calculate the difference between the target safety stock level and the current quantity.

📝 4. Create Purchase Order Task

Assign a task to the Procurement Officer to initiate the buying process for identified parts.

📄 5. Create Purchase Order Entry

Generate a new entry in the 'Purchase Orders' data model with the calculated quantities and part IDs.

✉️ 6. Notify Supplier

Send an automated email to the vendor's contact address with the details of the new order.



7. Update Part Status to 'On Order'

Update the status field in the 'Spare Parts' data model to reflect that a replenishment is in progress.

8. Assign Receiving Inspection

Create a task for the Warehouse Clerk to inspect the parts upon physical arrival.

9. Verify Shipment Accuracy

Compare the quantity received in the shipment against the quantity originally ordered in the PO.

10. Update Stock Quantities

Increment the quantity in the 'Spare Parts' data model by the amount received in the shipment.

11. Close Purchase Order

Update the status of the Purchase Order entry to 'Completed'.

12. Notify Inventory Manager

Send an email to the manager confirming that stock levels have been replenished and the order is closed.

13. Generate Monthly Stock Movement Report

Create a report summarizing all part entries updated during this cycle for audit purposes.

End

End of the Workflow/Process.