**Scenario: 1 :**

You are working as a data analyst for a retail company. Every month, the finance department shares an Excel file named customer\_invoices.xlsx which contains customer billing information. Your task is to automate the process of sending alert email notifications to customers whose invoice is due.

The Excel file has the following columns:

* CustomerID
* CustomerName
* Email
* InvoiceAmount
* InvoiceDueDate

Your goal is to:

1. Read the Excel file and identify customers whose InvoiceDueDate is today.
2. For each of these customers, send an email alert notifying them about their pending invoice.

**Your Tasks:**

Write a Python script that performs the following:

1. **Read the Excel file** customer\_invoices.xlsx using pandas.
2. **Filter** customers whose invoice due date is today.
3. **Send an email notification** to each customer using their email ID from the Email column.
4. The email subject should be:  
   Invoice Due Reminder - [CustomerName]
5. The email body should include:

Dear [CustomerName],

This is a reminder that your invoice of amount ₹[InvoiceAmount] is due today ([InvoiceDueDate]).

Kindly make the payment at your earliest convenience.

Regards,

Finance Team

**Scenario: 2:**

You are working as a Python developer at a bank. The loan department provides you with an Excel file named emi\_schedule.xlsx every month. This file contains details of customers who have active loans with upcoming EMIs. Your responsibility is to send automated alert emails to customers whose EMI is due **today**.

The Excel file contains the following columns:

* CustomerID
* CustomerName
* Email
* LoanAccountNumber
* EMIAmount
* EMIDueDate

Your goal is to:

1. Read the Excel file and identify customers whose EMIDueDate matches today's date.
2. Send a personalized email reminder to each of these customers.

**Your Tasks:**

Write a Python script that does the following:

1. **Read the Excel file** emi\_schedule.xlsx using pandas.
2. **Filter** records where EMIDueDate is today.
3. For each such customer:
   * Send an email alert using the Email column.
   * Email subject:  
     EMI Due Alert - [LoanAccountNumber]
   * Email body:

Dear [CustomerName],

This is a reminder that your EMI of ₹[EMIAmount] for your Loan Account Number [LoanAccountNumber] is due today ([EMIDueDate]).

Kindly ensure the payment is made to avoid penalties.

Regards,

Bank Loan Department

**Scenario: 3**

You are working as an HR automation developer at an IT company. The recruitment team shares an Excel file named job\_offers.xlsx that contains the details of selected candidates. Your task is to automate the process of sending **Job Offer Letter** emails to all candidates listed in the file.

The Excel file has the following columns:

* CandidateID
* CandidateName
* Email
* JobRole
* JoiningDate
* CTC

Your goal is to:

1. Read the Excel file.
2. Send a personalized offer letter email to each candidate using their email ID.

**Your Tasks:**

Write a Python script that performs the following:

1. **Read the Excel file** job\_offers.xlsx using pandas.
2. For each candidate in the list:
   * Send an email using the Email field.
   * Email subject:  
     Congratulations [CandidateName]! Your Job Offer from [CompanyName]
   * Email body:

Dear [CandidateName],

We are pleased to offer you the position of [JobRole] at [CompanyName].

Your joining date is [JoiningDate] and your CTC will be ₹[CTC].

Kindly confirm your acceptance by replying to this email.

We look forward to welcoming you on board.

Best Regards,

HR Team

[CompanyName]