# Data Analyst Assessment Test

## Candidate Information:

Name:

Email:

Phone:

Date:

## Section 1: Microsoft Excel

### 1. Data Manipulation and Analysis

You are provided with a dataset in an Excel file named sales\_data.xlsx. The dataset contains sales information including Vendor, Product, Functional Market, Region, Deployment Type, Half Year, Revenue.  
  
a. Calculate the total revenue for each region.   
  
b. Create a pivot table that shows the total revenue per product per region.

### 2. Data Visualization

Using the same dataset sales\_data.xlsx, create the following visualizations:  
  
a. A line chart showing the revenue trend over time for each region.   
  
b. A bar chart comparing total revenue of different products.

## Section 2: Python and Web Scraping

### 1. Data Analysis with Python

You are provided with a sheet named funding\_data containing company information

a. Write a Python script to read the sheet and perform the following analysis:  
 - Read the ‘Description’ of the companies and create a extract only the services or product offerings from each company in a different column.  
 - Determine the most funded month.  
  
b. Generate a summary report in a text file that includes the results of your analysis.

### 2. Web Scraping

Write a Python script to scrape data from https://www.findfunding.vc/ (e.g., funding size, investors and contacts) using BeautifulSoup or Scrapy. The script should:  
  
a. Extract the data and store it in a Pandas DataFrame.   
  
b. Save the DataFrame to a CSV file named ecommerce\_data.csv.

## Section 3: Analytical and Problem-Solving Skills

### Scenario-Based Question

You are given a dataset that has missing values, duplicates, and inconsistencies. Describe your approach to clean and prepare this data for analysis. Include the steps you would take and any tools or methods you would use.

## Section 5: Communication Skills

### Presentation of Findings

Prepare a brief report (max 500 words) summarizing the key findings from the analyses you performed in Sections 1 and 2. The report should be clear, concise, and well-structured, highlighting the most important insights and recommendations for the business.

## Submission Instructions:

Please complete the assessment within [6pm 19th June].  
  
Submit all scripts, SQL queries, and the Excel file via email to [tripathyhimansu@gmail.com and anu@trend-lytics.com].  
  
Include your name and contact information in all submitted files.