Data Science Internship – February 2026

Internship Task Documentation

Task Instructions

1. Log in to your **LMS** and navigate to:
   Assessment & Task → Task 4: Feb Internship Function with Loops – 2.
2. Open the **Google Form** provided in the task section to access your assigned Python problem.
3. Solve the problem using either **Jupyter Notebook** or **Google Colab**.
   Save your solution file in **.ipynb** format.
4. Upload (push) the `.ipynb` file to your **GitHub repository**.
   Ensure the repository link is in **HTTPS format** (e.g., `https://github.com/username/repository-name`).
5. Complete the **Google Form** by entering your required details and pasting your **GitHub repository HTTPS link**, then submit the form.

Submission Guidelines

- Your code must be **clean, well-structured, and properly organized**.
- Include **clear comments** explaining your logic wherever necessary.

Only submissions with a valid **GitHub HTTPS link submitted through the Google Form** will be considered for evaluation.

Problem 1: Mobile Recharge Validation System

Problem Statement

Create a function to validate a mobile recharge request.

Rules:

- Recharge amount must be ≥ ₹50
- Valid plans: 199, 299, 399, 599
- User should be allowed to retry if invalid

Real-Time Use

- Telecom recharge apps
- Payment gateways

Hint

- Use function for validation
- Use `while` loop for retry

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Problem 2: Inventory Reorder Alert System

Problem Statement

Given a dictionary of products and stock quantities:

- Print **Reorder Alert** if stock < 15
- Print **Stock OK** otherwise

Real-Time Use

- Warehouse systems
- Retail management

Hint

- Use function
- Use `for` loop on dictionary

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Problem 3: Student Result Processing System

Problem Statement

Create a function that:

- Accepts a list of student marks
- Calculates average marks
- Prints **Pass** if average ≥ 50 else **Fail**

Real-Time Use

- Online exam systems
- Evaluation portals

Hint

- Use loop to calculate total
- Return result from function

Problem 4: Cab Fare Estimator with Retry Option

Problem Statement

Create a cab fare calculator:

- Base fare = ₹50
- ₹12 per km
- Peak hour → 25% extra
- Allow retry using while loop

Real-Time Use

- Ride-hailing apps
- Transport systems

Hint

- Function for fare calculation
- While loop for retry

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Problem 5: Employee Attendance Eligibility Checker

Problem Statement

Create a function that:

- Accepts attendance list (`"P"`, `"A"`)
- Calculates attendance percentage
- Returns **Eligible** if ≥ 75% else **Not Eligible**

Real-Time Use

- HR payroll systems
- Internship tracking

Hint

- Use loop to count present days
- Use return statement

INNOMATICS RESEARCH LABS

Problem 6: Password Strength Checker

Problem Statement

Create a function to check password strength.

Rules:

- Minimum length = 8
- Must contain at least one digit
- Must contain at least one special character (`@#$`)

Real-Time Use

- Login systems
- Security validation

Hint

- Use loop over string
- Use conditions inside function