**README – Rearc Data Quest Submission**

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**Date -** 10/30/2025  
**AWS Region -** us-east-2  
**S3 Bucket -** rearc-dataquest-harpreet

**Folder Overview** (for quick navigation)

1. **Part 1 🡪 BLS Data Ingestion and keeping data in sync between API and S3**
   * rearc\_dataquest\_part1.ipynb 🡪 Jupyter Notebook
   * Link\_to\_Part1\_S3\_Files.txt 🡪 Text file with links to the uploaded CSV files in my AWS S3 bucket (rearc-dataquest-harpreet) fetched from bls API URL
2. **Part 2 🡪 DataUSA API Integration**
   * rearc\_dataquest\_part2.ipynb 🡪 Jupyter Notebook
   * population\_data.json 🡪 JSON file from datausa API URL
   * Link\_to\_Part2\_S3\_File.txt 🡪 Text file with link to the uploaded population\_data.json file in my AWS S3 bucket (rearc-dataquest-harpreet) fetched from datausa API URL
3. **Part 3 🡪 Analysis & Results**
   * rearc\_dataquest\_part3.ipynb 🡪 Jupyter Notebook
   * outputs 🡪 Folder outputs that contains resulting CSV files from data analysis of Part 1 and Part 2
     + Files -
       - best\_year\_per\_series.csv
       - population\_mean\_std\_2013\_2018.csv
       - prs30006032\_q01\_with\_population.csv
   * Link\_to\_Part3\_S3\_Files.txt 🡪 Text file with links to the uploaded CSV files resulting from data analysis of Part 1 and Part 2 in my AWS S3 bucket (rearc-dataquest-harpreet)
4. **Part 4 🡪 Terraform Infrastructure**
   * rearc\_dataquest\_part4\_tf 🡪 folder that contains all the terraform files
   * Key files inside rearc\_dataquest\_part4\_tf folder
     + main.tf, variables.tf, outputs.tf
     + myplan, terraform.lock.hcl
     + README.md (Terraform notes)
     + Lambda directories -
       - lambda\_ingest/
       - lambda\_report/
5. **Documentation**
   * Assistance of AI with Rearc Data Quest challenge.docx 🡪 write-up about how AI was used throughout the project