Hello Candidate,

Congratulations to you for being selected in the Practical Assignments round. In this round, we are going to check your Data Analytics, Programming, Problem Solving, Presentation, Writing, Code Quality, and real-time implementation skills. We are mentioning all the requirements from our side, and the problem statement. Please carefully read all the requirements and prepare your solutions for them. In case of any query or question, please reply to this email only.

**Assignment Details:**

**Dataset:** [Data.csv](https://rapyder-da-shareable-content.s3.amazonaws.com/DA-interview-assignment-resources/DA-Data-Analyst-interview-assignment-Data.csv)

**Problem Statement:** Inspiring by LinkedIn, indeed and work India, one start-up has been created called enjoying-jobs. The start-up aims to bring every possible job opportunity to its platform and present it in a simple way so that job candidates can make an enjoyable decisions for their career growth. Initially, it was done manually and worked pretty smooth but after getting attraction from the market they are unable to make simpler presentations of various jobs. To make the information process smoother they want some help from data analysts to analyse their data and find the following insights.

* What are the Job Opportunities in the Top 20 cities?
* What are the Job Opportunities in the Top 20 Industries?
* What are the Top 20 Job Categories?
* What are the Top 20 Job Roles?
* What is the Top 5 Location for Top 20 Industries?
* What are the Skills required for various job categories?
* What is the Average salary offered in the top 10 cities?
* What is the Average salary offered by the top 10 Industries in the top 5 locations?

Here your role is a Data Analyst to solve the above questions

**Requirements:**

* Use Amazon [Sagemaker Studio Lab](https://studiolab.sagemaker.aws/) as your data science Platform. (You can create a free account by clicking on request account)
* User python, pandas, NumPy, seaborn, plotly or matplotlib or any other python-based library and use jupyter notebook for your code and visualisation.
* Jupyter-based Notebook file that contains everything about your Data analysis, EDA, Visualisation, insight, conclusion and of questions etc. (Only .ipynb file is acceptable.)
* Pdf Document that describes your solutions. (up to 4 pages).
* Create a dashboard of the same questions using any BI or Visualisation tool and submit it as a video or Screenshot [-- Optional --].

**Submission:**

* We are accepting submission of your work via [GitHub](https://github.com/) repository only, you need to create a repository named “**YOUR-NAME-DA-ASSIGNMENT-RAPYDER**” and share the link of a repository to the same email by mentioning assignment submission.
* Using the same Amazon [Sagemaker Studio Lab](https://studiolab.sagemaker.aws/) you can clone and push your GitHub repository using either UI or terminal, our recommendation is to do the same practice for uploading your code to the GitHub repository.
* Repository Structure:
  + **YOUR-NAME-DA-ASSIGNMENT-RAPYDER**
    - Your\_work.ipynb
    - Your\_explaining\_document.pdf
    - Your\_dashboard\_video/screenshot [-- Optional --].
    - Extra\_scripts.py (If your work contains extra python scripts)

**Submission Date:** 3rd-Nov-2022, 4 PM IST

**Additional Note:**

* Your implementation should be implemented by you not others, you should not each corner of your implementation.
* Copying from the internet or any other sources is not allowed, after selecting for an interview call you should be able to explain whatever you have implemented.
* Proper code commenting, code style, explanation through a comment in a notebook, proper naming convention of variables, EDA when needed, all these are plus points.
* Request a free Sagemaker studio lab account and use it if it is activated; if not, use any other tool that is offering a Jupyter notebook.

**------ All the Best ------**