data-preprocessing

March 16, 2025

```python
[1]: import pandas as pd
     import numpy as np
     import matplotlib.pyplot as plt
     import seaborn as sns
     import math
     import warnings
     warnings.filterwarnings("ignore")
     import re
```

```python
[2]: data1 = pd.read_csv("Jobs_minmax_sal.csv")
     data2 = pd.read_csv("Jobs_loc_skills.csv")
     data3 = pd.read_csv("Job_skill_exp_sal.csv")
     data4 = pd.read_csv("Job_loc_sal_exp.csv")
     data5 = pd.read_csv("indeed_job_post.csv")
```

```python
[3]: data1.head()
```

```
[3]:    Unnamed: 0 company_name        job_title  min_experience avg_salary  \
     0           0          TCS  Data Scientist               2       7.8L
     1           1    Accenture  Data Scientist               2      12.8L
     2           2          IBM  Data Scientist               2      13.4L
     3           3     Cognizant  Data Scientist               2       9.8L
     4           4    Capgemini  Data Scientist               2       8.6L

        min_salary max_salary  num_of_salaries
     0        4.5L      16.0L              841
     1        5.8L      23.0L              501
     2        5.3L      25.0L              394
     3        5.0L      18.0L              318
     4        4.8L      14.6L              300
```

```python
[4]: data1.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1602 entries, 0 to 1601
Data columns (total 8 columns):
 #   Column           Non-Null Count  Dtype
---  ------           --------------  -----
```

```
0   Unnamed: 0       1602 non-null   int64
1   company_name     1602 non-null   object
2   job_title        1602 non-null   object
3   min_experience   1602 non-null   int64
4   avg_salary       1602 non-null   object
5   min_salary       1602 non-null   object
6   max_salary       1602 non-null   object
7   num_of_salaries  1602 non-null   int64
dtypes: int64(3), object(5)
memory usage: 100.3+ KB
```

1 Functions Used:

```
[5]: # Function to convert the range into mean or else return non convertable values␣
     ↪as NaN
     def convert_value(val):
         if isinstance(val, str):
             # Check if the value is a range using regex
             val = val.strip()  # Remove any leading/trailing whitespace
             match = re.match(r'^(\d+)\s*-\s*(\d+)$', val)
             if match:
                 low, high = map(int, match.groups())
                 return (low + high) // 2

             # Try to convert to an integer
             try:
                 return int(val)
             except ValueError:
                 # If conversion fails, return NaN
                 return np.nan
         else:
             return np.nan
```

Since I preferred using average of the salary rather than a range which will be simpler for mapping
or visualization i will use Option 2 here. You guys can try using Option 1 if you want to apply
functions on it later.

Example of how to use it:

```
data3['salary'] = data3['salary'].apply(convert_value)
```

```
[6]: # Function to detect $, split the range, multiply by 81, and return␣
     ↪non-convertible values as is.
     def dollar_ruppee(val):
         if isinstance(val, str):
             # Check if the value is a range with a dollar sign (e.g., "$2000 -␣
     ↪4000")
             if re.match(r'^\$\s*\d+\s*-\s*\d+$', val):
```

```
            # Split the range into two numbers and remove the $ sign
            low, high = map(int, re.split(r'\s*-\s*', val.replace('$', '').
↪strip()))
            low *= 81
            high *= 81
            # Merge them back into a range string
            return f' {low} - {high}'

        # Check if it's a single dollar value (e.g., "$2000")
        elif re.match(r'^\$\s*\d+$', val):
            # Remove the $ sign and convert to int
            single_value = int(val.replace('$', '').strip())
            single_value *= 81
            return f' {single_value}'
        try:
            return int(val)
        except ValueError:
            # If conversion fails, return the value as-is
            return val
    else:
        return val
```

Function to detect $, split the range, multiply by 81, and merge them back else return the non convertable values as is.

2 Data Preprocessing on Data2

```
[7]: data2.head()
```

```
[7]:    Unnamed: 0                                             roles  \
    0           0           Data Scientist/ Academic Counselor
    1           1                                 Data Scientist
    2           2                          Senior Data Scientist
    3           3   Data Scientist - Machine Learning & Statistica…
    4           4                                 Data Scientist

                                       companies          locations  \
    0   GREAT LAKES E-LEARNING SERVICES PRIVATE LIMITED   Chennai, Bengaluru
    1                Shell India Markets Private Limited              Chennai
    2                                     Decision Point              Gurgaon
    3                            Talent Stock Solutions                Delhi
    4                Zen3Tech (A Tech Mahindra Company)            Hyderabad

       experience                                            skills
    0    2-7 Yrs   Data Science\nArtificial Intelligence\ntrainin…
    1    5-7 Yrs   Data Science\nMultivariate Analysis\nFactor An…
```

```
2      3-5 Yrs   Azure\ntimeseries forecasting\nMachine Learnin…
3      2-5 Yrs   Data Science\nR\nC\nData Scientist\nStatistica…
4      3-8 Yrs   R\nA/B Testing\nData Manipulation\nMachine Lea…
```

```python
[8]: data2 = data2.rename(columns = {'companies' : 'company_name', 'Unnamed: 0' :
     ↪'ID', 'roles' : 'job_title'})
     data2[['min_experience','unwanted']] = data2['experience'].str.split("-",n = 1,
     ↪expand = True)
     data2 = data2.drop(['experience','unwanted'], axis = 1)
     data2['skills'] = data2['skills'].str.split('\n')
     data2.head()
```

```
[8]:    ID                                    job_title  \
     0   0            Data Scientist/ Academic Counselor
     1   1                                Data Scientist
     2   2                         Senior Data Scientist
     3   3   Data Scientist - Machine Learning & Statistica…
     4   4                                Data Scientist


                                      company_name           locations  \
     0   GREAT LAKES E-LEARNING SERVICES PRIVATE LIMITED   Chennai, Bengaluru
     1               Shell India Markets Private Limited             Chennai
     2                                   Decision Point             Gurgaon
     3                            Talent Stock Solutions               Delhi
     4                   Zen3Tech (A Tech Mahindra Company)           Hyderabad


                                               skills min_experience
     0   [Data Science, Artificial Intelligence, traini…              2
     1   [Data Science, Multivariate Analysis, Factor A…              5
     2   [Azure, timeseries forecasting, Machine Learni…              3
     3   [Data Science, R, C, Data Scientist, Statistic…              2
     4   [R, A/B Testing, Data Manipulation, Machine Le…              3
```

```python
[9]: data2.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 598 entries, 0 to 597
Data columns (total 6 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   ID              598 non-null    int64
 1   job_title       598 non-null    object
 2   company_name    598 non-null    object
 3   locations       598 non-null    object
 4   skills          598 non-null    object
 5   min_experience  598 non-null    object
dtypes: int64(1), object(5)
```

```
memory usage: 28.2+ KB
```

3 Data Preprocessing on Data3

```
[10]: data3.head()
```

```
[10]:    Unnamed: 0                  Job Salary Job Experience Required  \
      0           0  Not Disclosed by Recruiter               5 - 10 yrs
      1           1  Not Disclosed by Recruiter                2 - 5 yrs
      2           2  Not Disclosed by Recruiter                0 - 1 yrs
      3           3       2,00,000 - 4,00,000 PA.                0 - 5 yrs
      4           4  Not Disclosed by Recruiter                2 - 5 yrs

                                            Key Skills  \
      0                   Media Planning| Digital Media
      1       pre sales| closing| software knowledge| clien…
      2       Computer science| Fabrication| Quality check|…
      3                               Technical Support
      4       manual testing| test engineering| test cases|…

                                   Role Category  \
      0                               Advertising
      1                              Retail Sales
      2                                       R&D
      3  Admin/Maintenance/Security/Datawarehousing
      4                       Programming & Design

                                       Functional Area  \
      0  Marketing , Advertising , MR , PR , Media Plan…
      1           Sales , Retail , Business Development
      2                       Engineering Design , R&D
      3  IT Software - Application Programming , Mainte…
      4                      IT Software - QA & Testing

                                   Industry                         Job Title
      0  Advertising, PR, MR, Event Management  Media Planning Executive/Manager
      1          IT-Software, Software Services          Sales Executive/Officer
      2                 Recruitment, Staffing                     R&D Executive
      3          IT-Software, Software Services        Technical Support Engineer
      4          IT-Software, Software Services                  Testing Engineer
```

```
[11]: data3['Job Salary'] = data3['Job Salary'].str.replace('Not Disclosed by␣
      ↪Recruiter', 'ND')
      data3 = data3.rename(columns = {'Unnamed: 0' : 'ID', 'Job Title' : 'job_title',␣
      ↪'Job Experience Required' : 'experience', 'Job Salary' : 'salary'})
```

```
data3[['min_experience', 'unwanted']] = data3['experience'].str.split("-",n =
 ↪1, expand = True)
data3 = data3.drop(['experience', 'unwanted'], axis = 1)
data3['Key Skills'] = data3['Key Skills'].str.split('|')
data3.head()
```

[11]:   ID   salary \
     0   0   ND
     1   1   ND
     2   2   ND
     3   3 2,00,000 - 4,00,000 PA.
     4   4   ND

                                        Key Skills \
     0   [Media Planning, Digital Media]
     1 [pre sales, closing, software knowledge, c…
     2 [Computer science, Fabrication, Quality che…
     3   [Technical Support]
     4 [manual testing, test engineering, test cas…

                                        Role Category \
     0   Advertising
     1   Retail Sales
     2   R&D
     3 Admin/Maintenance/Security/Datawarehousing
     4   Programming & Design

                                        Functional Area \
     0 Marketing , Advertising , MR , PR , Media Plan…
     1   Sales , Retail , Business Development
     2   Engineering Design , R&D
     3 IT Software - Application Programming , Mainte…
     4   IT Software - QA & Testing

                             Industry   job_title \
     0 Advertising, PR, MR, Event Management Media Planning Executive/Manager
     1   IT-Software, Software Services   Sales Executive/Officer
     2   Recruitment, Staffing   R&D Executive
     3   IT-Software, Software Services   Technical Support Engineer
     4   IT-Software, Software Services   Testing Engineer

       min_experience
     0   5
     1   2
     2   0
     3   0
     4   2
```

```
[12]: data3.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 27010 entries, 0 to 27009
Data columns (total 8 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   ID              27010 non-null  int64
 1   salary          27010 non-null  object
 2   Key Skills      27010 non-null  object
 3   Role Category   27010 non-null  object
 4   Functional Area 27010 non-null  object
 5   Industry        27010 non-null  object
 6   job_title       27010 non-null  object
 7   min_experience  27010 non-null  object
dtypes: int64(1), object(7)
memory usage: 1.6+ MB
```

4 Data Preprocessing on Data4

```
[13]: data4.head()
```

```
[13]:                          job_title  \
      0      Business Development Associate
      1  IELTS/PTE/Spoken English Trainer
      2                   Fashion Designer
      3          Corporate Sales Executive
      4             Junior Python Developer


                                 company_name   location  \
      0                           Break The Code     Mumbai
      1              DePioneer Education Overseas      Delhi
      2                         Valkyre Clothing     Mumbai
      3  Kompass India Information Private Limited     Mumbai
      4      Extension Technologies Private Limited  Faridabad


                       ctc experience                              posted
      0   2,00,000 - 3,00,000  0-1 years                         3 days ago
      1   3,00,000 - 3,50,000  0-2 years                         1 week ago
      2   3,00,000 - 3,50,000  0-2 years  3 days ago\n\n\nBe an early applicant
      3   2,00,000 - 4,00,000  0-5 years                        3 weeks ago
      4   2,40,000 - 3,60,000  0-2 years                        2 weeks ago
```

```
[14]: data4 = data4.drop(['posted'], axis = 1)
      data4['experience'].unique()
```

7

```
[14]: array(['0-1 years', '0-2 years', '0-5 years', '0-4 years', '1-3 years',
             '1-5 years', '1 year', '3-5 years', '1-4 years', '2-4 years',
             '1-2 years', '0-3 years', '2-5 years', '0 years', '4-5 years',
             '2 years', '3 years', '2-3 years', '4 years', '3-4 years',
             '4-6 years', '7-10 years', '10-15 years', '6-10 years',
             '5-7 years', '2-10 years', '3-6 years', '3-7 years'], dtype=object)
```

```
[15]: data4[['min_experience', 'unwanted']] = data4['experience'].str.split('-',␣
      ↪expand = True, n = 1)
      data4 = data4.drop(['unwanted', 'experience'], axis = 1)
```

```
[16]: data4.head()
```

```
[16]:                             job_title  \
      0      Business Development Associate
      1    IELTS/PTE/Spoken English Trainer
      2                    Fashion Designer
      3           Corporate Sales Executive
      4              Junior Python Developer

                                     company_name   location  \
      0                             Break The Code     Mumbai
      1                  DePioneer Education Overseas    Delhi
      2                           Valkyre Clothing     Mumbai
      3    Kompass India Information Private Limited     Mumbai
      4      Extension Technologies Private Limited  Faridabad

                               ctc min_experience
      0    2,00,000 - 3,00,000               0
      1    3,00,000 - 3,50,000               0
      2    3,00,000 - 3,50,000               0
      3    2,00,000 - 4,00,000               0
      4    2,40,000 - 3,60,000               0
```

```
[17]: data4.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 4596 entries, 0 to 4595
Data columns (total 5 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   job_title       4596 non-null   object
 1   company_name    4596 non-null   object
 2   location        4596 non-null   object
 3   ctc             4596 non-null   object
 4   min_experience  4596 non-null   object
dtypes: object(5)
```

memory usage: 179.7+ KB

5 Data Preprocessing on Data5

[18]: ```python
data5.head()
```

[18]:
```
                    job_title        job_role                   company  \
0              Data Engineer   Data Engineer                   Deloitte
1    Data Analytics Engineer   Data Engineer   Larsen & Toubro Limited
2          Sr. Data Engineer   Data Engineer                   Genworth
3  Data Analyst/Data Engineer  Data Engineer       The English Channel
4              Data Engineer   Data Engineer           Global Employees

          job_location                                       job_summary  \
0    Chennai, Tamil Nadu  Develop solutions with an Agile Development te…
1      Vadodara, Gujarat  Possess past experience in developing Systems …
2  Noida, Uttar Pradesh  Build machine learning pipelines for a variety…
3     Ahmedabad, Gujarat  Extract data from online sources and capture t…
4                 Remote  Design, build and maintain reliable and scalab…

           post_date        today                     job_salary  \
0  Posted 30+ days ago  2023-03-08                              ?
1        Posted Today  2023-03-08     4,00,000 - 7,00,000 a year
2  Posted 30+ days ago  2023-03-08                              ?
3   Posted 8 days ago  2023-03-08     6,00,000 - 9,00,000 a year
4   Posted 3 days ago  2023-03-08  10,00,000 - 30,00,000 a year

                                             job_url
0  https://in.indeed.com/pagead/clk?mo=r&ad=-6NYl…
1  https://in.indeed.com/rc/clk?jk=67af78864fbf6c…
2  https://in.indeed.com/pagead/clk?mo=r&ad=-6NYl…
3  https://in.indeed.com/company/The-English-Chan…
4  https://in.indeed.com/company/Global-Employees…
```

[19]: ```python
data5 = data5.drop(['post_date', 'today', 'job_url'], axis = 1)
data5['job_salary'] = data5['job_salary'].replace('?' , 'ND').str.replace(',',
 ↪'').str.replace(' a year', '')
data5['job_summary'] = data5['job_summary'].fillna(np.nan)
data5.head()
```

[19]:
```
                    job_title   job_role   company \
0   Data Engineer   Data Engineer   Deloitte
1   Data Analytics Engineer   Data Engineer   Larsen & Toubro Limited
2   Sr. Data Engineer   Data Engineer   Genworth
3 Data Analyst/Data Engineer Data Engineer   The English Channel
4   Data Engineer   Data Engineer   Global Employees
```

```
        job_location                                          job_summary  \
0   Chennai, Tamil Nadu  Develop solutions with an Agile Development te…
1     Vadodara, Gujarat  Possess past experience in developing Systems …
2  Noida, Uttar Pradesh  Build machine learning pipelines for a variety…
3    Ahmedabad, Gujarat  Extract data from online sources and capture t…
4                Remote  Design, build and maintain reliable and scalab…

             job_salary
0                    ND
1      400000 -  700000
2                    ND
3      600000 -  900000
4    1000000 - 3000000
```

[20]: `data5.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1258 entries, 0 to 1257
Data columns (total 6 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   job_title     1258 non-null   object
 1   job_role      1258 non-null   object
 2   company       1258 non-null   object
 3   job_location  1258 non-null   object
 4   job_summary   1257 non-null   object
 5   job_salary    1258 non-null   object
dtypes: object(6)
memory usage: 59.1+ KB
```

6 Data Preprocessing on Data6

[21]:
```python
# import pandas as pd

# df = pd.read_csv("hf://datasets/hugginglearners/data-science-job-salaries/
 ↪ds_salaries.csv")
# df.to_csv('Hugging_Data.csv', index = False)
# df.info()
```

[22]:
```python
data6 = pd.read_csv('Hugging_Data.csv')
```

[23]:
```python
data6.head()
```

[23]:
```
   Unnamed: 0  work_year experience_level employment_type  \
0           0       2020               MI              FT
1           1       2020               SE              FT
```

```
2              2       2020              SE            FT
3              3       2020              MI            FT
4              4       2020              SE            FT

                     job_title   salary salary_currency  salary_in_usd  \
0             Data Scientist    70000             EUR          79833
1  Machine Learning Scientist   260000             USD         260000
2           Big Data Engineer    85000             GBP         109024
3         Product Data Analyst   20000             USD          20000
4  Machine Learning Engineer   150000             USD         150000

   employee_residence  remote_ratio company_location company_size
0                 DE             0              DE            L
1                 JP             0              JP            S
2                 GB            50              GB            M
3                 HN             0              HN            S
4                 US            50              US            L
```

[24]: `data6.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 607 entries, 0 to 606
Data columns (total 12 columns):
 #   Column              Non-Null Count  Dtype
---  ------              --------------  -----
 0   Unnamed: 0          607 non-null    int64
 1   work_year           607 non-null    int64
 2   experience_level    607 non-null    object
 3   employment_type     607 non-null    object
 4   job_title           607 non-null    object
 5   salary              607 non-null    int64
 6   salary_currency     607 non-null    object
 7   salary_in_usd       607 non-null    int64
 8   employee_residence  607 non-null    object
 9   remote_ratio        607 non-null    int64
 10  company_location    607 non-null    object
 11  company_size        607 non-null    object
dtypes: int64(5), object(7)
memory usage: 57.0+ KB
```

[ ]:

7 Standardizing Column Names

```
[25]: data1.columns = data1.columns.str.lower().str.replace(' ', '_')
      data2.columns = data2.columns.str.lower().str.replace(' ', '_')
      data3.columns = data3.columns.str.lower().str.replace(' ', '_')
      data4.columns = data4.columns.str.lower().str.replace(' ', '_')
      data5.columns = data5.columns.str.lower().str.replace(' ', '_')
      data6.columns = data6.columns.str.lower().str.replace(' ', '_')
```

8 Standardizing Data types

```
[26]: data1['avg_salary'] = data1['avg_salary'].str.replace('L', '').astype(float) *␣
      ↪100000
      data1['min_salary'] = data1['min_salary'].str.replace('L', '').astype(float) *␣
      ↪100000
      data1['max_salary'] = data1['max_salary'].str.replace('L', '').astype(float) *␣
      ↪100000
```

```
[27]: data1 = data1.rename(columns = {'unnamed:_0' : 'id'})
      data1.head()
```

```
[27]:    id company_name        job_title  min_experience  avg_salary  min_salary  \
      0   0          TCS  Data Scientist               2    780000.0    450000.0
      1   1    Accenture  Data Scientist               2   1280000.0    580000.0
      2   2          IBM  Data Scientist               2   1340000.0    530000.0
      3   3    Cognizant  Data Scientist               2    980000.0    500000.0
      4   4    Capgemini  Data Scientist               2    860000.0    480000.0

         max_salary  num_of_salaries
      0   1600000.0              841
      1   2300000.0              501
      2   2500000.0              394
      3   1800000.0              318
      4   1460000.0              300
```

```
[28]: data2.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 598 entries, 0 to 597
Data columns (total 6 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   id            598 non-null    int64
 1   job_title     598 non-null    object
 2   company_name  598 non-null    object
 3   locations     598 non-null    object
```

```
    4   skills           598 non-null    object
    5   min_experience  598 non-null    object
    dtypes: int64(1), object(5)
    memory usage: 28.2+ KB
```

[29]: `data2.head()`

[29]:
```
       id                            job_title  \
    0   0          Data Scientist/ Academic Counselor
    1   1                              Data Scientist
    2   2                       Senior Data Scientist
    3   3  Data Scientist - Machine Learning & Statistica…
    4   4                              Data Scientist

                                  company_name          locations  \
    0  GREAT LAKES E-LEARNING SERVICES PRIVATE LIMITED  Chennai, Bengaluru
    1              Shell India Markets Private Limited             Chennai
    2                                  Decision Point             Gurgaon
    3                           Talent Stock Solutions               Delhi
    4                Zen3Tech (A Tech Mahindra Company)           Hyderabad

                                          skills min_experience
    0  [Data Science, Artificial Intelligence, traini…              2
    1  [Data Science, Multivariate Analysis, Factor A…              5
    2  [Azure, timeseries forecasting, Machine Learni…              3
    3  [Data Science, R, C, Data Scientist, Statistic…              2
    4  [R, A/B Testing, Data Manipulation, Machine Le…              3
```

[ ]:

[30]: `data3.head()`

[30]:
```
       id                salary  \
    0   0                    ND
    1   1                    ND
    2   2                    ND
    3   3  2,00,000 - 4,00,000 PA.
    4   4                    ND

                                   key_skills  \
    0                   [ Media Planning,  Digital Media]
    1  [ pre sales,  closing,  software knowledge,  c…
    2  [ Computer science,  Fabrication,  Quality che…
    3                              [ Technical Support]
    4  [ manual testing,  test engineering,  test cas…

                                  role_category  \
```

```
0                             Advertising
1                            Retail Sales
2                                     R&D
3    Admin/Maintenance/Security/Datawarehousing
4                     Programming & Design

                               functional_area  \
0    Marketing , Advertising , MR , PR , Media Plan…
1             Sales , Retail , Business Development
2                       Engineering Design , R&D
3    IT Software - Application Programming , Mainte…
4                     IT Software - QA & Testing

                               industry                     job_title  \
0    Advertising, PR, MR, Event Management  Media Planning Executive/Manager
1             IT-Software, Software Services          Sales Executive/Officer
2                      Recruitment, Staffing                   R&D Executive
3             IT-Software, Software Services    Technical Support Engineer
4             IT-Software, Software Services               Testing Engineer

     min_experience
0                 5
1                 2
2                 0
3                 0
4                 2
```

```python
data3['salary'] = data3['salary'].str.replace('PA.', '').str.replace(',', '').
  ↪replace('0', np.NaN)
data3['min_experience'] = pd.to_numeric(data3['min_experience'],␣
  ↪errors='coerce')
data3['min_experience'] = data3['min_experience'].fillna(0).astype(int)
# data3['salary'] = data3['salary'].astype(float)
```

```python
data3['salary'].unique()
```

```
array([' ND ', '200000 - 400000 ', '700000 - 1700000 ', …,
       ' As per Industry norm ', 'INR 1400000 - 1500000 ',
       'INR 700000 - 800000 '], dtype=object)
```

```python
data3['salary'] = data3['salary'].replace(' As per Industry norm ', np.NaN).str.
  ↪replace('INR ', '').str.replace(' ','').replace(' ...', np.NaN)
data3['salary'] = data3['salary'].apply(convert_value)
data3['salary'].unique()
```

```
array([          nan, 3.00000000e+05, 1.20000000e+06, 2.50000000e+05,
       3.00000000e+06, 4.25000000e+05, 2.12500000e+05, 3.50000000e+05,
```

```
   2.87500000e+05, 5.00000000e+05, 1.10000000e+06, 2.37500000e+05,
   6.25000000e+05, 4.00000000e+05, 3.25000000e+05, 1.00000000e+06,
   9.25000000e+05, 7.50000000e+05, 4.62500000e+05, 4.12500000e+05,
   2.25000000e+05, 1.60000000e+06, 2.75000000e+05, 9.00000000e+05,
   5.37500000e+05, 9.50000000e+05, 6.50000000e+05, 7.50000000e+04,
   6.00000000e+05, 4.50000000e+05, 4.75000000e+05, 1.50000000e+06,
   1.87500000e+05, 5.12500000e+05, 1.40000000e+06, 1.80000000e+05,
   1.25000000e+05, 3.12500000e+05, 1.15000000e+06, 1.65000000e+06,
   1.45000000e+06, 1.75000000e+05, 1.87500000e+06, 8.50000000e+05,
   2.62500000e+05, 1.02500000e+06, 5.50000000e+05, 7.75000000e+05,
   7.50000000e+06, 4.87500000e+05, 2.00000000e+05, 3.37500000e+05,
   5.62500000e+05, 3.75000000e+05, 1.62500000e+05, 1.50000000e+05,
   8.00000000e+05, 2.00000000e+06, 1.85000000e+06, 5.75000000e+05,
   4.50000000e+06, 2.10000000e+06, 1.37500000e+05, 1.90000000e+06,
   5.50000000e+04, 1.30000000e+06, 7.25000000e+05, 8.25000000e+05,
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   7.00000000e+05, 3.50000000e+06, 1.55000000e+05, 2.75000000e+06,
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   1.25000000e+06, 6.75000000e+05, 2.25000000e+06, 1.55000000e+06,
   8.75000000e+05, 2.62500000e+06, 2.50000000e+06, 3.12500000e+06,
   1.70000000e+06, 2.02500000e+06, 1.82500000e+06, 1.85000000e+05,
   1.12500000e+06, 1.07500000e+05, 1.05000000e+06, 1.00000000e+05,
   1.80000000e+06, 5.50000000e+06, 8.75000000e+04, 2.37500000e+06,
   2.45000000e+06, 5.00000000e+06, 5.00000000e+04, 6.37500000e+05,
   1.00000000e+00, 1.45000000e+05, 2.12500000e+06, 5.87500000e+05,
   4.25000000e+06, 8.50000000e+04, 2.17500000e+06, 2.15000000e+06,
   3.25000000e+06, 2.27500000e+06, 9.75000000e+05, 1.92500000e+06,
   6.00000000e+06, 1.50000000e+04, 1.90000000e+05, 9.00000000e+04,
   1.57500000e+05, 9.50000000e+04, 2.30000000e+06, 2.87500000e+06,
   1.32500000e+05, 1.40000000e+05, 2.05000000e+06, 1.65000000e+05,
   6.62500000e+05, 4.00000000e+06, 1.07500000e+06, 1.02500000e+05,
   1.67500000e+05, 6.75000000e+06, 2.35000000e+06, 1.97500000e+06,
   8.00000000e+04, 6.50000000e+06, 1.22500000e+05, 1.17500000e+06,
   9.25000000e+04, 7.50000000e+03, 1.52500000e+05, 1.00000010e+13,
   6.87500000e+05, 6.00000000e+04, 6.25000000e+06, 2.00000000e+04,
   5.25000000e+06, 1.22500000e+06, 1.20000000e+05, 1.27500000e+06,
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   2.55000000e+06, 6.50000000e+04, 1.27500000e+05, 3.87500000e+06,
   1.82500000e+05, 1.00000000e+07, 1.75000000e+04, 1.00000000e+04,
   9.00000886e+11])
```

[34]: `data3['salary'].isnull().sum()`

[34]: 20162

```
[35]: data3.head()
```

```
[35]:   id    salary                                    key_skills  \
      0   0       NaN              [ Media Planning,  Digital Media]
      1   1       NaN  [ pre sales,  closing,  software knowledge,  c…
      2   2       NaN  [ Computer science,  Fabrication,  Quality che…
      3   3  300000.0                             [ Technical Support]
      4   4       NaN  [ manual testing,  test engineering,  test cas…


                                    role_category  \
      0                                Advertising
      1                               Retail Sales
      2                                        R&D
      3  Admin/Maintenance/Security/Datawarehousing
      4                        Programming & Design


                                   functional_area  \
      0  Marketing , Advertising , MR , PR , Media Plan…
      1           Sales , Retail , Business Development
      2                      Engineering Design , R&D
      3  IT Software - Application Programming , Mainte…
      4                    IT Software - QA & Testing


                                   industry                      job_title  \
      0  Advertising, PR, MR, Event Management  Media Planning Executive/Manager
      1          IT-Software, Software Services         Sales Executive/Officer
      2                  Recruitment, Staffing                  R&D Executive
      3          IT-Software, Software Services      Technical Support Engineer
      4          IT-Software, Software Services                Testing Engineer


         min_experience
      0               5
      1               2
      2               0
      3               0
      4               2
```

```
[36]: data3.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 27010 entries, 0 to 27009
Data columns (total 8 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   id              27010 non-null  int64
 1   salary          6848 non-null   float64
 2   key_skills      27010 non-null  object
```

```
 3   role_category   27010 non-null   object
 4   functional_area 27010 non-null   object
 5   industry        27010 non-null   object
 6   job_title       27010 non-null   object
 7   min_experience  27010 non-null   int32
dtypes: float64(1), int32(1), int64(1), object(5)
memory usage: 1.5+ MB
```

[ ]:

[37]:
```python
print(data4.head())
data4['ctc'].unique()
```

```
                        job_title  \
0       Business Development Associate
1    IELTS/PTE/Spoken English Trainer
2                    Fashion Designer
3            Corporate Sales Executive
4               Junior Python Developer


                                 company_name    location  \
0                                Break The Code      Mumbai
1                    DePioneer Education Overseas       Delhi
2                               Valkyre Clothing      Mumbai
3  Kompass India Information Private Limited      Mumbai
4      Extension Technologies Private Limited  Faridabad


                     ctc min_experience
0    2,00,000 - 3,00,000              0
1    3,00,000 - 3,50,000              0
2    3,00,000 - 3,50,000              0
3    2,00,000 - 4,00,000              0
4    2,40,000 - 3,60,000              0
```

[37]: array([' 2,00,000 - 3,00,000', ' 3,00,000 - 3,50,000',
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       ' 2,40,000 - 3,00,000', ' 2,00,000 - 2,50,000',
       ' 2,52,000 - 4,00,000', ' 7,00,000 - 10,00,000',
       ' 5,00,000 - 8,00,000', ' 4,00,000 - 7,00,000',
       ' 3,00,000 - 5,00,000', ' 4,00,000 - 5,00,000',
       ' 2,00,000 - 5,00,000', ' 2,00,000 - 3,50,000', ' 2,75,000',
       ' 5,00,000 - 7,00,000', ' 3,00,000', ' 2,10,000 - 2,17,995',
       ' 5,00,000 - 10,00,000', ' 2,00,000 - 3,60,000', ' 5,00,000',
       ' 3,00,000 - 4,00,000', ' 2,50,000 - 3,00,000', ' 7,00,000',
       ' 2,50,000 - 4,75,000', ' 3,20,000 - 3,20,001',
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       ' 2,60,000 - 4,00,000', ' 2,40,000 - 5,50,000',

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'  2,00,000 - 2,00,400', '  2,64,000', '  4,20,000 - 4,20,000',
'  7,20,000 - 12,00,000', '  5,00,000 - 11,00,000',
'  7,20,000 - 7,20,000', 'Competitive salary',
'  8,00,000 - 14,00,000', '  15,00,000 - 25,00,000',
'  3,26,000 - 5,00,000', '  4,80,000 - 7,20,000',
'  7,00,000 - 15,00,000', '  4,20,000 - 4,80,000',
'  20,00,000 - 60,00,000', '  3,00,000 - 5,40,000',
'  3,00,000 - 45,00,000', '  7,00,000 - 16,00,000',
'  43,20,000 - 86,40,000', '  11,00,000 - 11,00,000',
'  2,64,000 - 4,20,000', '  15,00,000 - 20,00,000',
'  60,00,000 - 60,00,000', '  4,80,000 - 4,80,000',
'  12,00,000 - 24,00,000', '  9,60,000 - 12,00,000',
'  3,96,000 - 4,20,000', '  2,16,000 - 3,12,000',
'  21,60,000 - 30,00,000', '  3,00,000 - 7,20,000',
'  3,00,000 - 3,48,000', '  3,00,000 - 7,80,000',
'  12,00,000 - 25,00,000', '  2,20,000 - 8,00,000',
'  25,92,000 - 36,00,000', '  6,00,000 - 6,00,000',
'  12,00,000 - 16,00,000', '  2,80,000 - 3,50,000',
```

```
            ' 2,20,000 - 3,10,000', ' 6,00,000 - 18,00,000',
            ' 3,60,000 - 3,60,000', ' 3,00,000 - 3,00,000',
            ' 2,40,000 - 7,20,000', ' 2,16,000 - 2,28,000',
            ' 3,36,000 - 4,56,000', ' 2,76,000 - 3,36,000',
            ' 5,50,000 - 6,00,000', ' 2,76,000 - 4,20,000',
            ' 3,24,000 - 7,80,000', ' 5,40,000 - 7,20,000',
            ' 36,00,000 - 86,40,000', ' 4,20,000 - 10,20,000',
            ' 2,40,000 - 3,84,000', ' 5,00,000 - 5,00,000',
            ' 2,80,000 - 4,00,000', ' 2,50,000 - 7,00,000',
            ' 5,40,000 - 6,60,000', ' 22,00,000 - 27,00,000',
            ' 2,80,000 - 4,20,000', ' 10,00,000 - 32,00,000',
            ' 7,00,000 - 14,00,000', ' 20,00,000 - 33,00,000',
            ' 14,00,000 - 17,00,000', ' 16,80,000 - 19,20,000',
            ' 4,20,000 - 7,20,000', ' 2,40,000 - 3,12,000',
            ' 8,00,000 - 15,00,000', ' 2,40,000 - 2,76,000',
            ' 2,76,000 - 3,24,000', ' 3,60,000 - 8,40,000',
            ' 8,00,000 - 13,00,000', ' 9,60,000 - 16,80,000',
            ' 6,60,000 - 8,40,000', ' 40,00,000 - 60,00,000',
            ' 5,40,000 - 7,80,000', ' 4,60,000 - 6,00,000',
            ' 28,80,000 - 36,00,000', ' 6,60,000 - 10,80,000',
            ' 2,40,000 - 3,36,000', ' 5,00,000 - 8,50,000',
            ' 4,80,000 - 9,60,000', ' 50,40,000 - 64,80,000',
            ' 21,60,000 - 36,00,000', ' 2,20,000 - 4,25,000',
            ' 17,00,000 - 25,00,000', ' 24,00,000 - 30,00,000'], dtype=object)
```

```python
[38]: data4['ctc'] = data4['ctc'].str.replace(',', '').str.replace(' ', '')
      data4['ctc'] = data4['ctc'].apply(dollar_ruppee)
      data4['ctc'] = data4['ctc'].str.replace(' ','').str.replace(' ','')
      data4['ctc'] = data4['ctc'].apply(convert_value)
      data4['ctc'].unique()
```

```
[38]: array([ 250000.,   325000.,   300000.,   270000.,   225000.,   326000.,
               850000.,   650000.,   550000.,   400000.,   450000.,   350000.,
               275000.,       nan,   600000.,   213997.,   750000.,   280000.,
               362500.,   320000.,   240000.,   265000.,   330000.,   395000.,
               365000.,   387500.,   800000.,   306000.,   680000.,   500000.,
               345600.,   415000.,   290000.,   237500.,   380000.,   375000.,
               425000.,   273000.,   212500.,   210000.,   602000.,   205000.,
               530000.,   390000.,   260000.,   495000.,   295000.,   348000.,
               475000.,   208000.,   950000.,   235000.,   540000.,   318000.,
               220000.,   310000.,   700000.,   370000.,   200000.,   430000.,
               640000.,   675000.,   505000.,   232000.,   625000.,   725000.,
               324999.,   307000.,   360000.,   525000.,   228000.,   335000.,
               258000.,   610000.,   230000.,  1350000.,   840000.,   420000.,
              1000000.,   760000.,   480000.,   595000.,   242500.,   470000.,
               255000.,   510000.,   305000.,   570000.,   825000.,  1100000.,
               900000.,   285000.,   315000.,   565000.,   215500.,   410000.,
```

```
        780000.,   245000.,   910000.,   844000.,   312500.,   202500.,
        252000.,   245500.,   385000.,   340000.,   287500.,   268000.,
        810000.,   215000.,   227000.,   212000.,   264000.,   345000.,
        332000.,   262500.,   249999.,   288000.,   282000.,   720000.,
        487500.,   312000.,  1200000.,   324000.,   299000.,   200500.,
        355000.,   283000.,   685000.,   337500.,   298500.,   234000.,
        284000.,   213000.,   246000.,  3500000.,   214000.,   200250.,
        322500.,   232500.,   267500.,   775000.,   276000.,   660000.,
        222000.,   202000.,   575000.,   240500.,   267300.,   455000.,
        327000.,   414000.,  1400000.,   253032.,   224999.,  1250000.,
        412500.,   233032.,   216000.,   222500.,   116680.,   490000.,
        560000.,   217500.,  1500000.,  1180000.,  2500000.,   294000.,
        207500.,   277500.,  1700000.,   257500.,   465000.,   580000.,
       1050000.,   263500.,   624000.,   790000.,   305500.,   388800.,
        417150.,   207000.,  6145000.,   303500.,   435000.,   314500.,
        233000.,   372000.,   372500.,   298000.,   238000.,   242000.,
        875000.,   200475.,   200200.,   960000.,  2000000.,   413000.,
       4000000.,  2400000.,  1150000.,  6480000.,   342000.,  1750000.,
       6000000.,  1800000.,  1080000.,   408000.,  2580000.,  1850000.,
       3096000.,   396000.,   552000.,   630000.,  6120000.,  2450000.,
       2100000.,  2650000.,  1550000.,  1320000.,  5000000.,  3240000.,
        870000.,  5760000.,  2880000.,  2700000.])
```

[39]: `data4['id'] = range(1,len(data4) + 1)`

[40]: `data4.head()`

[40]:
```
                              job_title  \
0      Business Development Associate
1   IELTS/PTE/Spoken English Trainer
2                     Fashion Designer
3           Corporate Sales Executive
4              Junior Python Developer


                                  company_name   location        ctc  \
0                             Break The Code     Mumbai  250000.0
1                 DePioneer Education Overseas      Delhi  325000.0
2                            Valkyre Clothing     Mumbai  325000.0
3  Kompass India Information Private Limited     Mumbai  300000.0
4     Extension Technologies Private Limited  Faridabad  300000.0


   min_experience  id
0               0   1
1               0   2
2               0   3
3               0   4
4               0   5
```

```
[ ]:
```

```
[41]: data5.head()
```

```
[41]:                  job_title       job_role                    company  \
      0              Data Engineer   Data Engineer                   Deloitte
      1    Data Analytics Engineer   Data Engineer   Larsen & Toubro Limited
      2            Sr. Data Engineer Data Engineer                   Genworth
      3  Data Analyst/Data Engineer Data Engineer        The English Channel
      4              Data Engineer   Data Engineer          Global Employees

                    job_location                                     job_summary  \
      0   Chennai, Tamil Nadu   Develop solutions with an Agile Development te…
      1      Vadodara, Gujarat  Possess past experience in developing Systems …
      2  Noida, Uttar Pradesh  Build machine learning pipelines for a variety…
      3     Ahmedabad, Gujarat  Extract data from online sources and capture t…
      4               Remote   Design, build and maintain reliable and scalab…

                    job_salary
      0                     ND
      1     400000 -  700000
      2                     ND
      3     600000 -  900000
      4   1000000 -  3000000
```

```
[42]: data5['job_salary'].unique()
```

```
[42]: array(['ND', ' 400000 -  700000', ' 600000 -  900000',
             ' 1000000 -  3000000', ' 124237 a month', ' 1000000 -  2000000',
             ' 600000 -  1200000', ' 120000 -  160000 a month',
             'Up to  1100000', ' 1080337 -  2222967', ' 300000 -  1500000',
             ' 795849 -  2145795', ' 1400000', ' 1500000 -  2500000',
             'Up to  50000 a month', 'Up to  70000 a month', 'Up to  1300000',
             'Up to  1500000', 'From  800000', ' 400000 -  600000',
             ' 1500000 -  3300000', 'Up to  1800000', ' 120000 -  350000',
             ' 2000000 -  4000000', 'From  2000000', ' 1000000 -  1500000',
             ' 629253 -  2019813', 'Up to  3000000', ' 750000 -  1600000',
             ' 30000 -  42000 a month', ' 238142 -  895716',
             ' 1000 -  3000 a day', ' 372169 -  1631390', 'Up to  2000000',
             ' 2000000 -  2500000', ' 837381 -  2800000', ' 1000000 -  1700000',
             ' 658343 -  2072355', ' 1200000 -  1300000', ' 400000 -  800000',
             'From  704145', ' 500000 a month', 'From  90000 a month',
             ' 37163 -  124556 a month', ' 900632 -  2229561', 'Up to  2542788',
             'From  70000 a month', ' 1000000 -  4000000',
             ' 55000 -  60000 a month', 'Up to  6500000', 'Up to  1400000',
             ' 800000 -  1200000', 'From  300000', 'Up to  1000000',
             'Up to  1989295', ' 589767 -  1966346', ' 900000 -  1900000',
```

```
' 1200000 -  3000000', ' 2000000 -  2200000', ' 761450 -  2039523',
' 1000000 -  1200000', ' 460000 -  640000', ' 200000 -  400000',
' 200000 -  1000000', ' 500000 -  700000', ' 621283 -  2008299',
' 632499 -  2220215', ' 657793 -  2072072', ' 200000 -  550000',
' 1500000 -  2300000', ' 17518 -  55208 a month',
' 575373 -  1942626', ' 500000 -  2200000', ' 750000 -  850000',
'From  40000 a month', 'Up to 2554623', ' 40000 -  50000 a month',
'Up to  150000 a month', ' 200000 -  250000', ' 600000 -  1400000',
' 500000 -  800000', ' 360000', ' 300000 -  600000',
' 40000 -  65000 a month', ' 20000 -  50000 a month',
' 100000 -  200000 a month', ' 15000 -  30000 a month',
' 20000 -  45000 a month', ' 90000 -  250000 a month',
' 250000 -  300000', ' 700000 -  1000000', 'Up to  900000',
'Up to  300000', ' 120000 -  400000', ' 20000 -  30000 a month',
' 300000 -  500000', 'From  360000', ' 1500000 -  2000000',
' 30000 -  40000 a month', ' 25000 -  50000 a month',
' 1000000 -  1400000', ' 900000 -  1000000', 'Up to  550000',
' 200000 -  300000', ' 1500000 -  2400000', ' 300000 -  400000',
' 25000 -  35000 a month', ' 60000 -  80000 a month',
' 400000 -  800517', ' 50000 -  70000 a month',
' 1500000 -  2822396', ' 1500000', ' 324000 -  720000',
'From  400000', ' 10000 -  30000 a month', 'Up to  400000',
' 500000 -  700000 a month', ' 1800000', ' 1000000 -  1300000',
' 1000000', 'Up to  25000 a month', ' 85000 -  140000 a month',
'From  1000 a day', ' 15000 -  20000 a month', 'From  500000',
' 50000 -  125000 a month', ' 2400000 -  3200000',
' 12000 -  20000 a month', ' 15000 -  35000 a month',
' 10000 -  20000 a month', 'From  600000', 'Up to  600000',
' 25000 -  30000 a month', ' 343581 -  1473359', 'From  1000000',
'Up to 3500000', 'From  140 an hour', ' 150000 -  250000 a month',
'From  15336 a month', ' 20000 -  25000 a month',
' 300000 -  350000', ' 544050 -  2474278',
' 40000 -  60000 a month', 'From  20000 a month',
' 60000 -  180000', ' 300000 -  420000', ' 240000 -  300000',
' 18000 -  23000 a month', ' 500000 -  1000000',
' 800000 -  1000000', ' 327510 -  1509075', ' 400000 -  1100000',
' 70000 -  110000 a month', ' 1200000 -  2100000', ' 3000000',
' 1200000 -  1800000', ' 422994 -  865449', ' 3000000 -  4000000',
'Up to  1200000', ' 10000 a month', 'Up to  1600000',
'Up to  800000', ' 90000 -  150000 a month', ' 480000 -  1300000',
' 407584 -  702721', 'Up to  2700000', ' 543872 -  664792',
' 1200000 -  2000000', ' 580000 -  1200000', ' 2000000 -  3000000',
' 800000 -  1500000', 'From  150000', 'Up to  15000 a month',
'From  80000 a month', 'From  447043', ' 1800000 -  2500000',
' 600000 -  1000000', ' 2000000', ' 611143 -  1500000',
' 3000000 -  5000000', ' 10000 -  15000 a month',
'From  5000 a month', ' 9000 -  12000 a month',
```

```
      '685285 - 1907336', '95000 - 115000 a month',
      '3500000 - 4200000', '92000 - 122000 a month',
      '600000 - 800000', '8086 - 23097 a month',
      '5000000 - 6000000', '3600000', 'From 500 an hour',
      '15000 a month', '700000 - 2500000', '35000 - 40000 a month',
      '180000 - 240000', '1200000 - 1500000', '4000000 - 4600000',
      '672779 - 1901068', '35000 - 38000 a month', '40000',
      '448567 - 1878900', '300000 - 320000', 'Up to 700000',
      '700000 - 1500000', '26077 - 60943 a month',
      '15000 - 18000 a month', '15000 - 25000 a month',
      '500000 - 2000000', '1000000 - 1800000', '240000 - 600000',
      '20000 - 48253 a month', '200000 - 600000',
      '30000 - 35000 a month', '2000000 - 2800000',
      '15600 - 18000 a month', '2500000 - 5500000', '30000 a month',
      '30000 - 70000 a month', '1500000 - 3000000', '4000000',
      '70000 - 80000 a month', '600000 - 2000000',
      '1500000 - 2200000', '1400000 - 1800000'], dtype=object)
```

[43]:
```python
original_nd_count = (data5['job_salary'].str.strip().str.lower() == 'nd').sum()
print(f"Original 'ND' entries: {original_nd_count}")
```

```
Original 'ND' entries: 906
```

[44]:
```python
data5.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1258 entries, 0 to 1257
Data columns (total 6 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   job_title     1258 non-null   object
 1   job_role      1258 non-null   object
 2   company       1258 non-null   object
 3   job_location  1258 non-null   object
 4   job_summary   1257 non-null   object
 5   job_salary    1258 non-null   object
dtypes: object(6)
memory usage: 59.1+ KB
```

[45]:
```python
import pandas as pd
import numpy as np
import re

def convert_salary(salary):
    if pd.isna(salary) or salary.strip() == '':
        return np.nan
    # Convert to string and handle dollar values first
```

```python
    salary_str = str(salary).strip()
    # Handle dollar conversions ( 81 per $1)
    if '$' in salary_str:
        # Remove commas and  symbols
        cleaned = salary_str.replace(' ', '').replace(',', '')
        # Match ranges like "$2000 - 4000" or "$3000"
        if '-' in cleaned:
            parts = cleaned.split('-')
            low = float(parts[0].replace('$', '').strip()) * 81
            high = float(parts[1].replace('$', '').strip()) * 81
            return (low + high) / 2 * 12   # Assume monthly if no unit
        else:
            return float(cleaned.replace('$', '').strip()) * 81 * 12   # Assume
↪annual
    # Process rupee values
    salary_str = salary_str.lower().replace(' ', '').replace(',', '').strip()
    # Handle 'ND' cases
    if salary_str in ['nd', 'n.d.']:
        return np.nan
    # Extract unit information
    unit = None
    if 'hour' in salary_str:
        unit = 'hour'
    elif 'month' in salary_str:
        unit = 'month'
    elif 'year' in salary_str:
        unit = 'year'
    elif 'day' in salary_str:
        unit = 'day'
    # Remove unit indicators and keywords
    salary_str = re.sub(r'\b(up to|from|an?|per|hour|month|year|day)\b', '',
↪salary_str).strip()
    # Handle range vs single value
    if '-' in salary_str:
        try:
            low, high = map(float, salary_str.split('-'))
            avg = (low + high) / 2
        except ValueError:
            return np.nan
    else:
        try:
            avg = float(salary_str)
        except ValueError:
            return np.nan
    # Apply unit conversion
    if unit == 'hour':
        return avg * 2080   # 40 hrs/week * 52 weeks
```

```python
        elif unit == 'month':
            return avg * 12
        elif unit == 'day':
            return avg * 260   # 5 days/week * 52 weeks
        else:   # Assume annual if no unit
            return avg
# Apply the conversion
data5['job_salary'] = data5['job_salary'].apply(convert_salary)
data5['job_salary'] = data5['job_salary'].apply(lambda x: int(x) if not pd.
  ↪isna(x) else np.nan)
```

```python
[46]: data5['id'] = range(1,len(data5) + 1)
```

```python
[47]: data5['job_role'].unique()
```

```python
[47]: array(['Data Engineer', 'Data Analyst', 'Data Scientist',
             'Machine Learning Engineer'], dtype=object)
```

```python
[48]: data5['job_salary'].unique()
```

```python
[48]: array([      nan,   550000.,   750000., 2000000., 1490844., 1500000.,
               900000., 1680000., 1100000., 1651652., 1470822., 1400000.,
               600000.,  840000., 1300000.,  800000.,  500000., 2400000.,
              1800000.,  235000., 3000000., 1250000., 1324533., 1175000.,
               432000.,  566929.,  520000., 1001779., 2250000., 1818690.,
              1350000., 1365349.,  704145., 6000000., 1080000.,  970314.,
              1565096., 2542788., 2500000.,  690000., 6500000., 1000000.,
               300000., 1989295., 1278056., 2100000., 1400486., 1314791.,
              1426357., 1364932.,  375000., 1900000.,  436356., 1258999.,
               480000., 2554623.,  540000.,  225000.,  650000.,  360000.,
               450000.,  630000.,  420000.,  270000.,  390000., 2040000.,
               275000.,  850000.,  260000.,  400000., 1750000., 1200000.,
               950000.,  250000., 1950000.,  350000.,  600258.,  720000.,
              2161198.,  522000.,  240000., 7200000., 1150000.,  210000.,
              1050000., 2800000.,  192000.,  180000.,  330000.,  908470.,
              3500000.,  291200.,  184032.,  325000., 1509164.,  120000.,
               246000.,  918292., 1650000.,  644221., 1600000., 1440000.,
               890000.,  555152., 2700000.,  604332.,  150000.,  960000.,
               447043., 2150000., 1055571., 4000000.,   60000.,  126000.,
              1296310., 1260000., 3850000., 1284000.,  700000.,  187098.,
              5500000., 3600000., 1040000., 4300000., 1286923.,  438000.,
                40000., 1163733.,  310000.,  522120.,  198000.,  409518.,
               201600., 1850000.])
```

```python
[49]: data5.head()
```

```
[49]:                    job_title         job_role                         company  \
      0               Data Engineer    Data Engineer                        Deloitte
      1     Data Analytics Engineer    Data Engineer  Larsen & Toubro Limited
      2           Sr. Data Engineer    Data Engineer                        Genworth
      3  Data Analyst/Data Engineer    Data Engineer      The English Channel
      4               Data Engineer    Data Engineer         Global Employees


                 job_location                                      job_summary  \
      0    Chennai, Tamil Nadu  Develop solutions with an Agile Development te…
      1      Vadodara, Gujarat  Possess past experience in developing Systems …
      2  Noida, Uttar Pradesh  Build machine learning pipelines for a variety…
      3     Ahmedabad, Gujarat  Extract data from online sources and capture t…
      4                 Remote  Design, build and maintain reliable and scalab…


         job_salary  id
      0         NaN   1
      1    550000.0   2
      2         NaN   3
      3    750000.0   4
      4   2000000.0   5
```

```
[50]: data5.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1258 entries, 0 to 1257
Data columns (total 7 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   job_title     1258 non-null   object
 1   job_role      1258 non-null   object
 2   company       1258 non-null   object
 3   job_location  1258 non-null   object
 4   job_summary   1257 non-null   object
 5   job_salary    352 non-null    float64
 6   id            1258 non-null   int64
dtypes: float64(1), int64(1), object(5)
memory usage: 68.9+ KB
```

```
[51]: data6.head()
```

```
[51]:    unnamed:_0  work_year experience_level employment_type  \
      0           0       2020               MI              FT
      1           1       2020               SE              FT
      2           2       2020               SE              FT
      3           3       2020               MI              FT
      4           4       2020               SE              FT
```

```
                 job_title  salary salary_currency  salary_in_usd  \
0              Data Scientist   70000             EUR          79833
1   Machine Learning Scientist  260000             USD         260000
2            Big Data Engineer   85000             GBP         109024
3          Product Data Analyst   20000             USD          20000
4   Machine Learning Engineer  150000             USD         150000

  employee_residence  remote_ratio company_location company_size
0                 DE             0               DE            L
1                 JP             0               JP            S
2                 GB            50               GB            M
3                 HN             0               HN            S
4                 US            50               US            L
```

[52]: `data6.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 607 entries, 0 to 606
Data columns (total 12 columns):
 #   Column              Non-Null Count  Dtype
---  ------              --------------  -----
 0   unnamed:_0          607 non-null    int64
 1   work_year           607 non-null    int64
 2   experience_level    607 non-null    object
 3   employment_type     607 non-null    object
 4   job_title           607 non-null    object
 5   salary              607 non-null    int64
 6   salary_currency     607 non-null    object
 7   salary_in_usd       607 non-null    int64
 8   employee_residence  607 non-null    object
 9   remote_ratio        607 non-null    int64
 10  company_location    607 non-null    object
 11  company_size        607 non-null    object
dtypes: int64(5), object(7)
memory usage: 57.0+ KB
```

[53]: `data6 = data6.rename(columns = {'unnamed:_0' : 'id'})`

[54]: `data6.head()`

[54]:
```
   id  work_year experience_level employment_type                 job_title  \
0   0       2020              MI              FT              Data Scientist
1   1       2020              SE              FT  Machine Learning Scientist
2   2       2020              SE              FT           Big Data Engineer
3   3       2020              MI              FT         Product Data Analyst
4   4       2020              SE              FT   Machine Learning Engineer
```

```
     salary salary_currency   salary_in_usd employee_residence  remote_ratio  \
0     70000             EUR            79833                 DE             0
1    260000             USD           260000                 JP             0
2     85000             GBP           109024                 GB            50
3     20000             USD            20000                 HN             0
4    150000             USD           150000                 US            50


   company_location company_size
0                DE            L
1                JP            S
2                GB            M
3                HN            S
4                US            L
```

[ ]:

9   Final Dataset

[55]: `data1.head()`

[55]:
```
   id company_name      job_title  min_experience  avg_salary  min_salary  \
0   0          TCS  Data Scientist               2    780000.0    450000.0
1   1     Accenture  Data Scientist               2   1280000.0    580000.0
2   2          IBM  Data Scientist               2   1340000.0    530000.0
3   3     Cognizant  Data Scientist               2    980000.0    500000.0
4   4     Capgemini  Data Scientist               2    860000.0    480000.0


   max_salary  num_of_salaries
0   1600000.0              841
1   2300000.0              501
2   2500000.0              394
3   1800000.0              318
4   1460000.0              300
```

[56]: `data1.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1602 entries, 0 to 1601
Data columns (total 8 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   id              1602 non-null   int64
 1   company_name    1602 non-null   object
 2   job_title       1602 non-null   object
 3   min_experience  1602 non-null   int64
 4   avg_salary      1602 non-null   float64
```

```
5   min_salary        1602 non-null   float64
6   max_salary        1602 non-null   float64
7   num_of_salaries   1602 non-null   int64
dtypes: float64(3), int64(3), object(2)
memory usage: 100.3+ KB
```

[57]: `data2.head()`

[57]:
```
   id                                    job_title  \
0   0              Data Scientist/ Academic Counselor
1   1                                  Data Scientist
2   2                           Senior Data Scientist
3   3  Data Scientist - Machine Learning & Statistica…
4   4                                  Data Scientist


                                company_name         locations  \
0  GREAT LAKES E-LEARNING SERVICES PRIVATE LIMITED  Chennai, Bengaluru
1            Shell India Markets Private Limited             Chennai
2                                 Decision Point             Gurgaon
3                         Talent Stock Solutions               Delhi
4             Zen3Tech (A Tech Mahindra Company)           Hyderabad


                                skills min_experience
0  [Data Science, Artificial Intelligence, traini…              2
1  [Data Science, Multivariate Analysis, Factor A…              5
2  [Azure, timeseries forecasting, Machine Learni…              3
3  [Data Science, R, C, Data Scientist, Statistic…              2
4  [R, A/B Testing, Data Manipulation, Machine Le…              3
```

[58]: `data2.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 598 entries, 0 to 597
Data columns (total 6 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   id              598 non-null    int64
 1   job_title       598 non-null    object
 2   company_name    598 non-null    object
 3   locations       598 non-null    object
 4   skills          598 non-null    object
 5   min_experience  598 non-null    object
dtypes: int64(1), object(5)
memory usage: 28.2+ KB
```

[59]: `data3.head()`

```
[59]:    id    salary                                               key_skills  \
     0   0       NaN                          [ Media Planning,  Digital Media]
     1   1       NaN  [ pre sales,  closing,  software knowledge,  c…
     2   2       NaN  [ Computer science,  Fabrication,  Quality che…
     3   3  300000.0                                    [ Technical Support]
     4   4       NaN  [ manual testing,  test engineering,  test cas…


                                    role_category  \
     0                                 Advertising
     1                                Retail Sales
     2                                         R&D
     3  Admin/Maintenance/Security/Datawarehousing
     4                       Programming & Design


                                    functional_area  \
     0  Marketing , Advertising , MR , PR , Media Plan…
     1            Sales , Retail , Business Development
     2                        Engineering Design , R&D
     3  IT Software - Application Programming , Mainte…
     4                      IT Software - QA & Testing


                                 industry                   job_title  \
     0  Advertising, PR, MR, Event Management  Media Planning Executive/Manager
     1          IT-Software, Software Services         Sales Executive/Officer
     2                 Recruitment, Staffing                    R&D Executive
     3          IT-Software, Software Services      Technical Support Engineer
     4          IT-Software, Software Services               Testing Engineer


        min_experience
     0               5
     1               2
     2               0
     3               0
     4               2

[60]:  data3.info()

       <class 'pandas.core.frame.DataFrame'>
       RangeIndex: 27010 entries, 0 to 27009
       Data columns (total 8 columns):
        #   Column          Non-Null Count  Dtype
       ---  ------          --------------  -----
        0   id              27010 non-null  int64
        1   salary          6848 non-null   float64
        2   key_skills      27010 non-null  object
        3   role_category   27010 non-null  object
        4   functional_area 27010 non-null  object
```

```
 5   industry         27010 non-null  object
 6   job_title        27010 non-null  object
 7   min_experience   27010 non-null  int32
dtypes: float64(1), int32(1), int64(1), object(5)
memory usage: 1.5+ MB
```

[61]: `data4.head()`

[61]:
```
                         job_title  \
0      Business Development Associate
1   IELTS/PTE/Spoken English Trainer
2                    Fashion Designer
3          Corporate Sales Executive
4            Junior Python Developer


                              company_name   location       ctc  \
0                            Break The Code     Mumbai  250000.0
1                DePioneer Education Overseas     Delhi  325000.0
2                          Valkyre Clothing     Mumbai  325000.0
3   Kompass India Information Private Limited     Mumbai  300000.0
4       Extension Technologies Private Limited  Faridabad  300000.0


   min_experience  id
0               0   1
1               0   2
2               0   3
3               0   4
4               0   5
```

[62]: `data4.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 4596 entries, 0 to 4595
Data columns (total 6 columns):
 #   Column          Non-Null Count  Dtype
---  ------          --------------  -----
 0   job_title       4596 non-null   object
 1   company_name    4596 non-null   object
 2   location        4596 non-null   object
 3   ctc             3932 non-null   float64
 4   min_experience  4596 non-null   object
 5   id              4596 non-null   int64
dtypes: float64(1), int64(1), object(4)
memory usage: 215.6+ KB
```

[63]: `data5.head()`
```

```
[63]:                   job_title        job_role                     company  \
      0              Data Engineer   Data Engineer                    Deloitte
      1    Data Analytics Engineer   Data Engineer   Larsen & Toubro Limited
      2          Sr. Data Engineer   Data Engineer                    Genworth
      3  Data Analyst/Data Engineer  Data Engineer       The English Channel
      4              Data Engineer   Data Engineer            Global Employees

                 job_location                                    job_summary  \
      0    Chennai, Tamil Nadu   Develop solutions with an Agile Development te…
      1        Vadodara, Gujarat  Possess past experience in developing Systems …
      2  Noida, Uttar Pradesh   Build machine learning pipelines for a variety…
      3      Ahmedabad, Gujarat  Extract data from online sources and capture t…
      4                  Remote  Design, build and maintain reliable and scalab…

         job_salary  id
      0         NaN   1
      1    550000.0   2
      2         NaN   3
      3    750000.0   4
      4   2000000.0   5

[64]:  data5.info()

      <class 'pandas.core.frame.DataFrame'>
      RangeIndex: 1258 entries, 0 to 1257
      Data columns (total 7 columns):
       #   Column        Non-Null Count  Dtype
      ---  ------        --------------  -----
       0   job_title     1258 non-null   object
       1   job_role      1258 non-null   object
       2   company       1258 non-null   object
       3   job_location  1258 non-null   object
       4   job_summary   1257 non-null   object
       5   job_salary    352 non-null    float64
       6   id            1258 non-null   int64
      dtypes: float64(1), int64(1), object(5)
      memory usage: 68.9+ KB

[65]:  data6.head()

[65]:    id  work_year experience_level employment_type              job_title  \
      0   0       2020               MI              FT              Data Scientist
      1   1       2020               SE              FT  Machine Learning Scientist
      2   2       2020               SE              FT             Big Data Engineer
      3   3       2020               MI              FT          Product Data Analyst
      4   4       2020               SE              FT   Machine Learning Engineer
```

```
      salary  salary_currency  salary_in_usd  employee_residence  remote_ratio  \
0      70000              EUR          79833                  DE             0
1     260000              USD         260000                  JP             0
2      85000              GBP         109024                  GB            50
3      20000              USD          20000                  HN             0
4     150000              USD         150000                  US            50

   company_location company_size
0                DE            L
1                JP            S
2                GB            M
3                HN            S
4                US            L
```

[66]: `data6.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 607 entries, 0 to 606
Data columns (total 12 columns):
 #   Column              Non-Null Count  Dtype
---  ------              --------------  -----
 0   id                  607 non-null    int64
 1   work_year           607 non-null    int64
 2   experience_level    607 non-null    object
 3   employment_type     607 non-null    object
 4   job_title           607 non-null    object
 5   salary              607 non-null    int64
 6   salary_currency     607 non-null    object
 7   salary_in_usd       607 non-null    int64
 8   employee_residence  607 non-null    object
 9   remote_ratio        607 non-null    int64
 10  company_location    607 non-null    object
 11  company_size        607 non-null    object
dtypes: int64(5), object(7)
memory usage: 57.0+ KB
```

10 Saving Pre-processed Data

[67]:
```python
data1.to_csv('Jobs_minmax_sal_cleaned.csv', index = False)
data2.to_csv('Jobs_loc_skills_cleaned.csv', index = False)
data3.to_csv("Job_skill_exp_sal_cleaned.csv", index = False)
data4.to_csv("Job_loc_sal_exp_cleaned.csv", index = False)
data5.to_csv("indeed_job_post_cleaned.csv", index = False)
data6.to_csv('Hugging_Data_cleaned.csv', index = False)
```

11   Merging Data

```python
[68]: import pandas as pd
      import numpy as np
      import matplotlib.pyplot as plt
      import seaborn as sns
      import math
      import warnings
      warnings.filterwarnings("ignore")
      import re
```

```python
[69]: data1 = pd.read_csv("Jobs_minmax_sal_cleaned.csv")
      data2 = pd.read_csv("Jobs_loc_skills_cleaned.csv")
      data3 = pd.read_csv("Job_skill_exp_sal_cleaned.csv")
      data4 = pd.read_csv("Job_loc_sal_exp_cleaned.csv")
      data5 = pd.read_csv("indeed_job_post_cleaned.csv")
      data6 = pd.read_csv('Hugging_Data_cleaned.csv')
```

```python
[70]: data5.rename(columns={'company': 'company_name'}, inplace=True)
```

```python
[71]: import pandas as pd

      # Assume you've already loaded your datasets as data1, data2, data3, data4,
      ↪data5, data6.

      # Merge datasets, collecting skills and salary
      merged_data = pd.merge(data1[['id', 'job_title', 'company_name', 'avg_salary']],
                             data2[['id', 'job_title', 'company_name', 'skills',
      ↪'min_experience']],
                             on=['id', 'job_title', 'company_name'], how='outer')

      merged_data = pd.merge(merged_data,
                             data3[['id', 'job_title', 'key_skills', 'salary',
      ↪'min_experience']],
                             on=['id', 'job_title'], how='outer')

      merged_data = pd.merge(merged_data,
                             data4[['id', 'job_title', 'company_name', 'location',
      ↪'min_experience']],
                             on=['id', 'job_title', 'company_name'], how='outer')

      merged_data = pd.merge(merged_data,
                             data5[['id', 'job_title', 'company_name', 'job_salary']],
                             on=['id', 'job_title', 'company_name'], how='outer')

      merged_data = pd.merge(merged_data,
                             data6[['job_title', 'salary']],
```

```python
                            on='job_title', how='outer')

# After merging, you can rename columns for clarity
merged_data.rename(columns={
    'skills': 'skills_data2',
    'key_skills': 'skills_data3',
    'job_salary': 'salary_data5',
    'salary': 'salary_data6',
}, inplace=True)

# Checking the final merged data
print(merged_data.info())

merged_data.to_csv('Merged_data.csv')
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 193494 entries, 0 to 193493
Data columns (total 13 columns):
 #   Column           Non-Null Count   Dtype
---  ------           --------------   -----
 0   id               193408 non-null  float64
 1   job_title        193494 non-null  object
 2   company_name     157710 non-null  object
 3   avg_salary       73738 non-null   float64
 4   skills_data2     24680 non-null   object
 5   min_experience_x 24680 non-null   float64
 6   skills_data3     35893 non-null   object
 7   salary_x         9308 non-null    float64
 8   min_experience_y 35893 non-null   float64
 9   location         5913 non-null    object
 10  min_experience   5913 non-null    object
 11  salary_data5     16356 non-null   float64
 12  salary_y         159946 non-null  float64
dtypes: float64(7), object(6)
memory usage: 19.2+ MB
None
```

```python
[72]: import pandas as pd

# Load the dataset
merged_data = pd.read_csv('Merged_data.csv')

# Default skills mapping
default_skills = {
    'Data Scientist': ['Python', 'Machine Learning', 'Data Analysis',
    ↪'Statistics', 'SQL'],
```

```python
        'Data Analyst': ['Excel', 'Data Visualization', 'SQL', 'Python',
 ↪'Statistical Analysis'],
        'Data Engineer': ['Python', 'SQL', 'ETL', 'Data Warehousing', 'Big Data'],
        'Machine Learning Engineer': ['Python', 'Machine Learning', 'Deep
 ↪Learning', 'TensorFlow', 'Data Modeling'],
        'Software Engineer': ['Java', 'C++', 'Python', 'Algorithms', 'Data
 ↪Structures'],
}

# Function to fill null skills based on job title
def fill_skills(row, column_name):
    skills = row[column_name]
    if pd.isna(skills):
        return default_skills.get(row['job_title'], ['General Skills'])
    elif not isinstance(skills, list):
        return eval(skills) if skills else default_skills.get(row['job_title'],
 ↪['General Skills'])
    return skills

# Apply the function to fill null values in 'skills_data2' and 'skills_data3'
for col in ['skills_data2', 'skills_data3']:
    merged_data[col] = merged_data.apply(lambda row: fill_skills(row, col),
 ↪axis=1)

# Combine skills from both columns
merged_data['combined_skills'] = merged_data.apply(
    lambda row: list(set(
        (row['skills_data2'] if isinstance(row['skills_data2'], list) else []) +
        (row['skills_data3'] if isinstance(row['skills_data3'], list) else [])
    )), axis=1
)

# Checking the final merged data
print(merged_data[['job_title', 'skills_data2', 'skills_data3',
 ↪'combined_skills']].head())
```

```
                                        job_title      skills_data2  \
0  " Deeper understanding of Transfer Pricing as …  [General Skills]
1              (India-Bangalore) Senior Data Scientist  [General Skills]
2  * A US based $4.0 billion world leader in staf…  [General Skills]
3  * A US based $4.0 billion world leader in staf…  [General Skills]
4  * TEKsystems is a part of Allegis Group -an $8…  [General Skills]

                                 skills_data3  \
0  [transfer pricing, Transfer Pricing Compliance…
1                                [General Skills]
2  [tfs, Win32, continuous integration, Maven, NU…
```

```
3    [Automation Testing, Test Engineering, Python,…
4    [web services, asp.net, wcf, mvc, jquery, java…

                                    combined_skills
0    [transfer pricing, Transfer Pricing Compliance…
1                                   [General Skills]
2    [Test Complete, ui testing, test engineering, …
3    [General Skills, Python, Automation Testing, T…
4    [javascript, wcf, General Skills, web services…
```

[73]: `merged_data.head()`

[73]:
```
     Unnamed: 0       id                              job_title  \
0             0  16448.0  " Deeper understanding of Transfer Pricing as …
1             1    765.0          (India-Bangalore) Senior Data Scientist
2             2   3907.0  * A US based $4.0 billion world leader in staf…
3             3  11467.0  * A US based $4.0 billion world leader in staf…
4             4   5861.0  * TEKsystems is a part of Allegis Group -an $8…

   company_name  avg_salary      skills_data2  min_experience_x  \
0           NaN         NaN  [General Skills]               NaN
1         Wesco         NaN  [General Skills]               NaN
2           NaN         NaN  [General Skills]               NaN
3           NaN         NaN  [General Skills]               NaN
4           NaN         NaN  [General Skills]               NaN

                                    skills_data3  salary_x  \
0  [transfer pricing, Transfer Pricing Compliance…  750000.0
1                                 [General Skills]       NaN
2  [tfs, Win32, continuous integration, Maven, NU…       NaN
3  [Automation Testing, Test Engineering, Python,…       NaN
4  [web services, asp.net, wcf, mvc, jquery, java…       NaN

   min_experience_y location min_experience  salary_data5  salary_y  \
0               2.0      NaN            NaN           NaN       NaN
1               NaN      NaN            NaN           NaN       NaN
2               3.0      NaN            NaN           NaN       NaN
3               4.0      NaN            NaN           NaN       NaN
4               1.0      NaN            NaN           NaN       NaN

                                    combined_skills
0    [transfer pricing, Transfer Pricing Compliance…
1                                   [General Skills]
2    [Test Complete, ui testing, test engineering, …
3    [General Skills, Python, Automation Testing, T…
4    [javascript, wcf, General Skills, web services…
```

```
[74]: merged_data['company_name'].unique()
```

```
[74]: array([nan, 'Wesco', 'Sigma Allied Services private Limited', …,
             'Manish Goel', 'Inventech Info Solutions Pvt. Ltd.',
             'Aidetic Software Pvt Ltd'], dtype=object)
```

```
[75]: # Default salary mapping
      default_salary = {
          'Data Scientist': 800000,
          'Data Analyst': 500000,
          'Data Engineer': 700000,
          'Machine Learning Engineer': 900000,
          'Software Engineer': 600000,
      }

      # Create a Series from the default salary mapping
      salary_map = pd.Series(default_salary)

      # Fill missing values in 'salary_x', 'salary_y', and 'salary_data5'
      for col in ['salary_x', 'salary_y', 'salary_data5']:
          merged_data[col] = merged_data.apply(
              lambda row: row[col] if pd.notna(row[col]) else salary_map.
       ↪get(row['job_title'], 0),
              axis=1
          )

      # Checking the final merged_data
      print(merged_data)
```

```
          Unnamed: 0        id  \
0                  0   16448.0
1                  1     765.0
2                  2    3907.0
3                  3   11467.0
4                  4    5861.0
...              ...       ...
193489        193489    1361.0
193490        193490    2143.0
193491        193491   11353.0
193492        193492     480.0
193493        193493      69.0

                                        job_title  \
0          " Deeper understanding of Transfer Pricing as …
1                   (India-Bangalore) Senior Data Scientist
2          * A US based $4.0 billion world leader in staf…
3          * A US based $4.0 billion world leader in staf…
```

```
4        * TEKsystems is a part of Allegis Group -an $8…
…                                                      …
193489                              iOS App Developer
193490                              iOS App Developer
193491  llegis Group India is a wholly owned subsidiar…
193492            opening For Data Scientist_Hyderabad
193493                            pyspark Data Engineer


                                    company_name  avg_salary  \
0                                            NaN         NaN
1                                          Wesco         NaN
2                                            NaN         NaN
3                                            NaN         NaN
4                                            NaN         NaN
…                                              …           …
193489                                 Manish Goel         NaN
193490  Buddha Education Association Incorporation         NaN
193491                                         NaN         NaN
193492          Inventech Info Solutions Pvt. Ltd.         NaN
193493                 Aidetic Software Pvt Ltd         NaN


                             skills_data2  min_experience_x  \
0                        [General Skills]               NaN
1                        [General Skills]               NaN
2                        [General Skills]               NaN
3                        [General Skills]               NaN
4                        [General Skills]               NaN
…                                       …                 …
193489                   [General Skills]               NaN
193490                   [General Skills]               NaN
193491                   [General Skills]               NaN
193492  [HIVE, R, Shell, Shell., SQL, Python]               2.0
193493                   [General Skills]               NaN


                                skills_data3  salary_x  \
0        [transfer pricing, Transfer Pricing Compliance…  750000.0
1                              [General Skills]       0.0
2        [tfs, Win32, continuous integration, Maven, NU…       0.0
3        [Automation Testing, Test Engineering, Python,…       0.0
4        [web services, asp.net, wcf, mvc, jquery, java…       0.0
…                                          …         …
193489                         [General Skills]       0.0
193490                         [General Skills]       0.0
193491  [Unix, Linux Administration, Redhat Linux, Cyb…  650000.0
193492                         [General Skills]       0.0
193493                         [General Skills]       0.0


       min_experience_y      location min_experience  salary_data5  \
```

```
0                2.0          NaN          NaN            0.0
1                NaN          NaN          NaN            0.0
2                3.0          NaN          NaN            0.0
3                4.0          NaN          NaN            0.0
4                1.0          NaN          NaN            0.0
...              ...          ...          ...            ...
193489           NaN  Work from home            0            0.0
193490           NaN  Work from home            0            0.0
193491           3.0          NaN          NaN            0.0
193492           NaN          NaN          NaN            0.0
193493           NaN          NaN          NaN      1175000.0

        salary_y                              combined_skills
0            0.0  [transfer pricing, Transfer Pricing Compliance…
1            0.0                              [General Skills]
2            0.0  [Test Complete, ui testing, test engineering, …
3            0.0  [General Skills, Python, Automation Testing, T…
4            0.0  [javascript, wcf, General Skills, web services…
...          ...                                           ...
193489       0.0                              [General Skills]
193490       0.0                              [General Skills]
193491       0.0  [Windows Server Administration, Operating Syst…
193492       0.0  [SQL, HIVE, R, Python, General Skills, Shell, …
193493       0.0                              [General Skills]

[193494 rows x 15 columns]
```

[76]: `merged_data.head()`

```
[76]:    Unnamed: 0        id                                    job_title  \
    0             0   16448.0  " Deeper understanding of Transfer Pricing as …
    1             1     765.0          (India-Bangalore) Senior Data Scientist
    2             2    3907.0  * A US based $4.0 billion world leader in staf…
    3             3   11467.0  * A US based $4.0 billion world leader in staf…
    4             4    5861.0  * TEKsystems is a part of Allegis Group -an $8…

      company_name  avg_salary      skills_data2  min_experience_x  \
    0          NaN         NaN  [General Skills]               NaN
    1        Wesco         NaN  [General Skills]               NaN
    2          NaN         NaN  [General Skills]               NaN
    3          NaN         NaN  [General Skills]               NaN
    4          NaN         NaN  [General Skills]               NaN

                                       skills_data3   salary_x  \
    0  [transfer pricing, Transfer Pricing Compliance…   750000.0
    1                                [General Skills]        0.0
    2  [tfs, Win32, continuous integration, Maven, NU…        0.0
```

```
3   [Automation Testing, Test Engineering, Python,…        0.0
4   [web services, asp.net, wcf, mvc, jquery, java…        0.0


   min_experience_y location min_experience  salary_data5  salary_y  \
0              2.0      NaN            NaN           0.0       0.0
1              NaN      NaN            NaN           0.0       0.0
2              3.0      NaN            NaN           0.0       0.0
3              4.0      NaN            NaN           0.0       0.0
4              1.0      NaN            NaN           0.0       0.0


                               combined_skills
0  [transfer pricing, Transfer Pricing Compliance…
1                            [General Skills]
2  [Test Complete, ui testing, test engineering, …
3  [General Skills, Python, Automation Testing, T…
4  [javascript, wcf, General Skills, web services…
```

[77]: `merged_data.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 193494 entries, 0 to 193493
Data columns (total 15 columns):
 #   Column            Non-Null Count   Dtype
---  ------            --------------   -----
 0   Unnamed: 0        193494 non-null  int64
 1   id                193408 non-null  float64
 2   job_title         193494 non-null  object
 3   company_name      157710 non-null  object
 4   avg_salary        73738 non-null   float64
 5   skills_data2      193494 non-null  object
 6   min_experience_x  24680 non-null   float64
 7   skills_data3      193494 non-null  object
 8   salary_x          193494 non-null  float64
 9   min_experience_y  35893 non-null   float64
 10  location          5913 non-null    object
 11  min_experience    5913 non-null    object
 12  salary_data5      193494 non-null  float64
 13  salary_y          193494 non-null  float64
 14  combined_skills   193494 non-null  object
dtypes: float64(7), int64(1), object(7)
memory usage: 22.1+ MB
```

[78]:
```python
# Default experience mapping
default_experience = {
    'Data Scientist': '2',
    'Data Analyst': '1',
    'Data Engineer': '2',
```

```
        'Machine Learning Engineer': '3',
        'Software Engineer': '1',
}

# Create a Series from the default experience mapping
experience_map = pd.Series(default_experience)

# Map default experience values based on job_title and fill missing values
for col in ['min_experience_x', 'min_experience_y', 'min_experience']:
    # Map default values
    merged_data[col] = merged_data['job_title'].map(experience_map).
  ↪fillna(merged_data[col])

# Checking the final merged_data
print(merged_data)
```

```
        Unnamed: 0          id  \
0                0     16448.0
1                1       765.0
2                2      3907.0
3                3     11467.0
4                4      5861.0
...            ...         ...
193489      193489      1361.0
193490      193490      2143.0
193491      193491     11353.0
193492      193492       480.0
193493      193493        69.0


                                                  job_title  \
0            " Deeper understanding of Transfer Pricing as …
1                      (India-Bangalore) Senior Data Scientist
2            * A US based $4.0 billion world leader in staf…
3            * A US based $4.0 billion world leader in staf…
4            * TEKsystems is a part of Allegis Group -an $8…
...                                                        …
193489                                      iOS App Developer
193490                                      iOS App Developer
193491  llegis Group India is a wholly owned subsidiar…
193492                opening For Data Scientist_Hyderabad
193493                              pyspark Data Engineer


                            company_name  avg_salary  \
0                                    NaN         NaN
1                                  Wesco         NaN
2                                    NaN         NaN
3                                    NaN         NaN
```

```
4                                                  NaN      NaN
…                                                   …        …
193489                              Manish Goel      NaN
193490  Buddha Education Association Incorporation      NaN
193491                                             NaN      NaN
193492          Inventech Info Solutions Pvt. Ltd.      NaN
193493                  Aidetic Software Pvt Ltd      NaN


                               skills_data2 min_experience_x  \
0                           [General Skills]             NaN
1                           [General Skills]             NaN
2                           [General Skills]             NaN
3                           [General Skills]             NaN
4                           [General Skills]             NaN
…                                        …               …
193489                      [General Skills]             NaN
193490                      [General Skills]             NaN
193491                      [General Skills]             NaN
193492  [HIVE, R, Shell, Shell., SQL, Python]             2.0
193493                      [General Skills]             NaN


                                        skills_data3  salary_x  \
0       [transfer pricing, Transfer Pricing Compliance…  750000.0
1                                     [General Skills]       0.0
2       [tfs, Win32, continuous integration, Maven, NU…       0.0
3       [Automation Testing, Test Engineering, Python,…       0.0
4       [web services, asp.net, wcf, mvc, jquery, java…       0.0
…                                                  …         …
193489                                [General Skills]       0.0
193490                                [General Skills]       0.0
193491  [Unix, Linux Administration, Redhat Linux, Cyb…  650000.0
193492                                [General Skills]       0.0
193493                                [General Skills]       0.0


     min_experience_y         location min_experience  salary_data5  \
0                 2.0              NaN            NaN           0.0
1                 NaN              NaN            NaN           0.0
2                 3.0              NaN            NaN           0.0
3                 4.0              NaN            NaN           0.0
4                 1.0              NaN            NaN           0.0
…                   …                …              …             …
193489            NaN  Work from home              0           0.0
193490            NaN  Work from home              0           0.0
193491            3.0              NaN            NaN           0.0
193492            NaN              NaN            NaN           0.0
193493            NaN              NaN            NaN     1175000.0


     salary_y                        combined_skills
```

```
0          0.0  [transfer pricing, Transfer Pricing Compliance…
1          0.0                               [General Skills]
2          0.0  [Test Complete, ui testing, test engineering, …
3          0.0  [General Skills, Python, Automation Testing, T…
4          0.0  [javascript, wcf, General Skills, web services…
…          …                                                 …
193489     0.0                               [General Skills]
193490     0.0                               [General Skills]
193491     0.0  [Windows Server Administration, Operating Syst…
193492     0.0  [SQL, HIVE, R, Python, General Skills, Shell, …
193493     0.0                               [General Skills]

[193494 rows x 15 columns]
```

[79]: `merged_data.head()`

[79]:
```
   Unnamed: 0       id                               job_title  \
0           0  16448.0  " Deeper understanding of Transfer Pricing as …
1           1    765.0             (India-Bangalore) Senior Data Scientist
2           2   3907.0  * A US based $4.0 billion world leader in staf…
3           3  11467.0  * A US based $4.0 billion world leader in staf…
4           4   5861.0  * TEKsystems is a part of Allegis Group -an $8…


  company_name  avg_salary    skills_data2 min_experience_x  \
0          NaN         NaN  [General Skills]              NaN
1        Wesco         NaN  [General Skills]              NaN
2          NaN         NaN  [General Skills]              NaN
3          NaN         NaN  [General Skills]              NaN
4          NaN         NaN  [General Skills]              NaN


                                     skills_data3  salary_x  \
0  [transfer pricing, Transfer Pricing Compliance…  750000.0
1                               [General Skills]       0.0
2  [tfs, Win32, continuous integration, Maven, NU…       0.0
3  [Automation Testing, Test Engineering, Python,…       0.0
4  [web services, asp.net, wcf, mvc, jquery, java…       0.0


  min_experience_y location min_experience  salary_data5  salary_y  \
0              2.0      NaN            NaN           0.0       0.0
1              NaN      NaN            NaN           0.0       0.0
2              3.0      NaN            NaN           0.0       0.0
3              4.0      NaN            NaN           0.0       0.0
4              1.0      NaN            NaN           0.0       0.0


                              combined_skills
0  [transfer pricing, Transfer Pricing Compliance…
1                               [General Skills]
```

```
2  [Test Complete, ui testing, test engineering, …
3  [General Skills, Python, Automation Testing, T…
4  [javascript, wcf, General Skills, web services…
```

[80]: `merged_data.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 193494 entries, 0 to 193493
Data columns (total 15 columns):
 #   Column           Non-Null Count   Dtype
---  ------           --------------   -----
 0   Unnamed: 0       193494 non-null  int64
 1   id               193408 non-null  float64
 2   job_title        193494 non-null  object
 3   company_name     157710 non-null  object
 4   avg_salary       73738 non-null   float64
 5   skills_data2     193494 non-null  object
 6   min_experience_x 158979 non-null  object
 7   skills_data3     193494 non-null  object
 8   salary_x         193494 non-null  float64
 9   min_experience_y 185823 non-null  object
 10  location         5913 non-null    object
 11  min_experience   163058 non-null  object
 12  salary_data5     193494 non-null  float64
 13  salary_y         193494 non-null  float64
 14  combined_skills  193494 non-null  object
dtypes: float64(5), int64(1), object(9)
memory usage: 22.1+ MB
```

[81]: `merged_data`

[81]:
```
        Unnamed: 0        id  \
0                0   16448.0
1                1     765.0
2                2    3907.0
3                3   11467.0
4                4    5861.0
...            ...       ...
193489      193489    1361.0
193490      193490    2143.0
193491      193491   11353.0
193492      193492     480.0
193493      193493      69.0

                                          job_title  \
0         " Deeper understanding of Transfer Pricing as …
1                 (India-Bangalore) Senior Data Scientist
```

```
2          * A US based $4.0 billion world leader in staf…
3          * A US based $4.0 billion world leader in staf…
4          * TEKsystems is a part of Allegis Group -an $8…
…                                                        …
193489                                   iOS App Developer
193490                                   iOS App Developer
193491  llegis Group India is a wholly owned subsidiar…
193492            opening For Data Scientist_Hyderabad
193493                               pyspark Data Engineer

                                   company_name  avg_salary  \
0                                           NaN         NaN
1                                         Wesco         NaN
2                                           NaN         NaN
3                                           NaN         NaN
4                                           NaN         NaN
…                                             …           …
193489                                Manish Goel         NaN
193490  Buddha Education Association Incorporation         NaN
193491                                       NaN         NaN
193492            Inventech Info Solutions Pvt. Ltd.         NaN
193493                  Aidetic Software Pvt Ltd         NaN

                                skills_data2 min_experience_x  \
0                            [General Skills]              NaN
1                            [General Skills]              NaN
2                            [General Skills]              NaN
3                            [General Skills]              NaN
4                            [General Skills]              NaN
…                                          …                …
193489                       [General Skills]              NaN
193490                       [General Skills]              NaN
193491                       [General Skills]              NaN
193492  [HIVE, R, Shell, Shell., SQL, Python]              2.0
193493                       [General Skills]              NaN

                                    skills_data3  salary_x  \
0       [transfer pricing, Transfer Pricing Compliance…  750000.0
1                                 [General Skills]       0.0
2       [tfs, Win32, continuous integration, Maven, NU…       0.0
3       [Automation Testing, Test Engineering, Python,…       0.0
4       [web services, asp.net, wcf, mvc, jquery, java…       0.0
…                                              …         …
193489                            [General Skills]       0.0
193490                            [General Skills]       0.0
193491  [Unix, Linux Administration, Redhat Linux, Cyb…  650000.0
193492                            [General Skills]       0.0
```

```
193493                                  [General Skills]        0.0

        min_experience_y         location min_experience  salary_data5  \
0                    2.0              NaN            NaN           0.0
1                    NaN              NaN            NaN           0.0
2                    3.0              NaN            NaN           0.0
3                    4.0              NaN            NaN           0.0
4                    1.0              NaN            NaN           0.0
...                  ...              ...            ...           ...
193489               NaN  Work from home              0           0.0
193490               NaN  Work from home              0           0.0
193491               3.0              NaN            NaN           0.0
193492               NaN              NaN            NaN           0.0
193493               NaN              NaN            NaN     1175000.0

        salary_y                            combined_skills
0            0.0  [transfer pricing, Transfer Pricing Compliance…
1            0.0                             [General Skills]
2            0.0  [Test Complete, ui testing, test engineering, …
3            0.0  [General Skills, Python, Automation Testing, T…
4            0.0  [javascript, wcf, General Skills, web services…
...          ...                                          …
193489       0.0                             [General Skills]
193490       0.0                             [General Skills]
193491       0.0  [Windows Server Administration, Operating Syst…
193492       0.0  [SQL, HIVE, R, Python, General Skills, Shell, …
193493       0.0                             [General Skills]

[193494 rows x 15 columns]
```

12   Saving Final Merged Dataset

```
[82]: merged_data.to_csv('Merged_data.csv')
```

12.1   Pre-processing Merged Dataset

```
[83]: import pandas as pd
      import numpy as np
      import matplotlib.pyplot as plt
      import seaborn as sns
      import math
      import warnings
      warnings.filterwarnings("ignore")
      import re
```

```
[84]: merged_data = pd.read_csv('Merged_data.csv')
```

```
[85]: merged_data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 193494 entries, 0 to 193493
Data columns (total 16 columns):
 #   Column           Non-Null Count   Dtype
---  ------           --------------   -----
 0   Unnamed: 0.1     193494 non-null  int64
 1   Unnamed: 0       193494 non-null  int64
 2   id               193408 non-null  float64
 3   job_title        193494 non-null  object
 4   company_name     157710 non-null  object
 5   avg_salary       73738 non-null   float64
 6   skills_data2     193494 non-null  object
 7   min_experience_x 158979 non-null  float64
 8   skills_data3     193494 non-null  object
 9   salary_x         193494 non-null  float64
 10  min_experience_y 185823 non-null  float64
 11  location         5913 non-null    object
 12  min_experience   163058 non-null  object
 13  salary_data5     193494 non-null  float64
 14  salary_y         193494 non-null  float64
 15  combined_skills  193494 non-null  object
dtypes: float64(7), int64(2), object(7)
memory usage: 23.6+ MB
```

```
[86]: merged_data = merged_data.drop(['Unnamed: 0','Unnamed: 0.1', 'id'], axis = 1)
      merged_data = merged_data[merged_data['combined_skills'] != '''['General␣
       ↪Skills']''']
```

```
[88]: merged_data
```

```
[88]:                                                 job_title  \
      0            " Deeper understanding of Transfer Pricing as …
      2            * A US based $4.0 billion world leader in staf…
      3            * A US based $4.0 billion world leader in staf…
      4            * TEKsystems is a part of Allegis Group -an $8…
      5            - TEKsystems India is a wholly owned subsidiar…
      …                                                         …
      193485                     data scientist (internship)
      193486                     data scientist (internship)
      193487                     data scientist (internship)
      193491  llegis Group India is a wholly owned subsidiar…
      193492           opening For Data Scientist_Hyderabad
```

```
                        company_name  avg_salary  \
0                                NaN         NaN
2                                NaN         NaN
3                                NaN         NaN
4                                NaN         NaN
5                                NaN         NaN
…                                  …           …
193485                   BugendaiTech        NaN
193486                   BugendaiTech        NaN
193487                   BugendaiTech        NaN
193491                            NaN        NaN
193492  Inventech Info Solutions Pvt. Ltd.        NaN


                                      skills_data2  min_experience_x  \
0                                 ['General Skills']               NaN
2                                 ['General Skills']               NaN
3                                 ['General Skills']               NaN
4                                 ['General Skills']               NaN
5                                 ['General Skills']               NaN
…                                                …                 …
193485                                ['Internship']               0.0
193486                                ['Internship']               0.0
193487                                ['Internship']               0.0
193491                            ['General Skills']               NaN
193492  ['HIVE', 'R', 'Shell', 'Shell.', 'SQL', 'Python']               2.0


                                      skills_data3  salary_x  \
0       ['transfer pricing', 'Transfer Pricing Complia…  750000.0
2       ['tfs', 'Win32', 'continuous integration', 'Ma…       0.0
3       ['Automation Testing', 'Test Engineering', 'Py…       0.0
4       ['web services', 'asp.net', 'wcf', 'mvc', 'jqu…       0.0
5       ['Devops', 'kubernet', 'kubernetes', 'Docker',…       0.0
…                                                …         …
193485                            ['General Skills']       0.0
193486                            ['General Skills']       0.0
193487                            ['General Skills']       0.0
193491  ['Unix', 'Linux Administration', 'Redhat Linux…  650000.0
193492                            ['General Skills']       0.0


        min_experience_y location min_experience  salary_data5  salary_y  \
0                    2.0      NaN            NaN           0.0       0.0
2                    3.0      NaN            NaN           0.0       0.0
3                    4.0      NaN            NaN           0.0       0.0
4                    1.0      NaN            NaN           0.0       0.0
5                    7.0      NaN            NaN           0.0       0.0
…                      …        …              …             …         …
193485               NaN      NaN            NaN           0.0       0.0
```

```
193486            NaN    NaN            NaN        0.0        0.0
193487            NaN    NaN            NaN        0.0        0.0
193491            3.0    NaN            NaN        0.0        0.0
193492            NaN    NaN            NaN        0.0        0.0

                                combined_skills
0            ['transfer pricing', 'Transfer Pricing Complia…
2            ['Test Complete', 'ui testing', 'test engineer…
3            ['General Skills', 'Python', 'Automation Testi…
4            ['javascript', 'wcf', 'General Skills', 'web s…
5            ['kubernetes', 'prometeus', 'Continuous Integr…
…                                               …
193485                  ['General Skills', 'Internship']
193486                  ['General Skills', 'Internship']
193487                  ['General Skills', 'Internship']
193491   ['Windows Server Administration', 'Operating S…
193492   ['SQL', 'HIVE', 'R', 'Python', 'General Skills…

[186336 rows x 13 columns]
```

[89]: `merged_data['combined_skills'].nunique()`

[89]: 25592

[90]: `merged_data['job_title'].unique()`

[90]: array(['" Deeper understanding of Transfer Pricing as a concept and provisions
       of TP law (definition of AE, methods etc.) in India. Basic understanding of
       other direct tax concepts and other allied laws. Good communication skills oral
       as well as written knowing business English is very important. Understanding of
       the clients business and the issues involved. Personal ownership for own work
       and performance Ability to understand the issues and discuss the same with
       senior colleagues in a proper way To keep updated with case laws and assist
       senior colleagues in application of the ratio of the judgements in the
       assignments handled Personal ownership (responsibility and accountability) for
       the work and performance Ability to learn new skills, share knowledge and
       experience To support senior colleague in the assignments in a fruitful manner
       To ensure that the risk and other policies are being adhered to " Experience is
       TP is mandatory. Interested candidates can share their resume on
       reetisingh@gmail.com or can call at 8355949358. Salary: INR 6,00,000 - 9,00,000
       PA. Industry: Other Functional Area: Other Employment Type: Permanent Job, Full
       Time',
            '* A US based $4.0 billion world leader in staffing services to over 6000
       customers globally. * World\'s largest "Technology" staffing company in the
       world today - IT, Telecom, Infrastructure and Engineering. * TEKsystems is a
       part of Allegis Group which is a $16.0 Billion US based privately held firm. One
       of the world\'s largest privately held companies (source: Forbes) * The 6th

Largest staffing company in the world and the 2nd Largest in the US. * One of
the top vendors to 90% of Fortune 500 companies. * Every year we deploy over
80,000 employees across different parts of the world. * Operations in North
America, Europe and Asia with over 300 offices across locations. * In India,
TEKsystems currently has 1000+ technical consultants employed at various Fortune
500 companies across the country. * For the second consecutive year, TEKsystems
was named to Fortune magazine\'s "100 Best Companies to Work For" in 2014. *
Please visit - www.teksystems.com ; www.allegisgroup.com, for more
information.',

'* A US based $4.0 billion world leader in staffing services to over 6000
customers globally. * World\'s largest "Technology" staffing company in the
world today - IT, Telecom, Infrastructure and Engineering. * TEKsystems is a
part of the Allegis Group which is a $16 Billion US based privately held firm.
One of the world\'s largest privately held companies (source: Forbes) * The 4th
Largest staffing company in the world and the 2nd Largest in the US. * One of
the top vendors to 90% of Fortune 500 companies. * Every year we deploy over
80,000 employees across different parts of the world. * Operations in North
America, Europe and Asia with over 300 offices across locations. * In India,
TEKsystems currently has 1800+ technical consultants employed at various Fortune
500 companies across the country. * For the second consecutive year, TEKsystems
was named to Fortune magazine\'s "100 Best Companies to Work For" in 2014. *
Please visit - www.teksystems.com; www.allegisgroup.com, for more information.',

'* TEKsystems is a part of Allegis Group -an $8.5 Billion US based
privately held firm. One of the world\'s largest privately held companies
(source: Forbes) * One of the world\'s largest "Technology" staffing companies
today - IT, Telecom, Infrastructure and Engineering. * Every year we deploy over
80,000 employees across different parts of the world. * Operations in North
America, Europe and Asia with over 300 offices * In India, we have more than
1000+ technical consultants employed at various Fortune 500 companies across
Bangalore, Hyderabad, Delhi, Mumbai, Pune & Chennai. * TEKsystems was named to
Fortune magazine\'s "100 Best Companies to Work For" list for 2013. * Please
visit - www.teksystems.com ; www.allegisgroup.com, for more information on us.',

'- TEKsystems India is a wholly owned subsidiary of Allegis Group, Inc, a
$11 billion enterprise - TEKsystems provides global IT professional recruitment
services to help organizations achieve their IT and business goals. - We provide
service across Applications, End User Support, IT Leadership, Networks
Infrastructure, Project & PMO - $3.8 billion world leader in Technology Staffing
Services - 6,000+ clients, with 98% client retention - Over 100 locations
throughout North America, Europe and Asia - 5,000 full time employees - Over
80,000 IT consultants deployed worldwide annually - #1 US Provider of IT
Recruitment - Best of Staffing Client Satisfaction and Candidate Satisfaction by
Inavero - Forbes America\'s Best Employers list - We have been listed in Fortune
Magazine under "100 Best Companies to Work For" for 5 consecutive years - Please
visit - www.teksystems.com ; www.allegisgroup.com, for more information on us. -
In India, the company specifically focuses on dealing with Technology products
and providing high-end engineering design and analysis, IT and ITES
services,Vendor Management, Training and Staffing services to Fortune 500

clients. – The 6th Largest staffing company in the world and the 2nd Largest in the US. – One of the top vendors to 99% of Fortune 500 companies. – Employs over 100,000 employees across different parts of the world Operations in North America, Europe and Asia with over 300 offices and now in India',

'. Reviewing protocol SAP & RAP preparation and implementation Sample size calculation Provides statistical consultations Preparing and reviewing randomization list Preparing and reviewing of tables, listing and graphs, as applicable Preparing and reviewing of statistical report, as applicable Provides support for blinding and unblinding documentations Preparing and reviewing standard operating procedures Training/Guiding/Mentoring associate biostatisticians and junior programmers. Job allocation & distribution to associate biostatisticians and junior programmers and evaluation of the progress of the project Facing client to answer statistical queries Any other responsibilities assigned by the organization from time to time Salary: Not Disclosed by Recruiter Industry: Pharma / Biotech / Clinical Research Functional Area: Other Employment Type: Full Time, Permanent',

'.1787_Data Scientist _Bangalore',

'1.IMS certification/ re certification & surveillance audits planning and arranging through third party certification Bodies. 2.Internal Audit planning and execution (Quarterly). 3.Field call rate (FCR) reduction by temporary & permanent actions. 4.External failure cost reduction by daily technical communication with all India service person for urgent spares support in order to avoid CMRA & DDIR. 5.Service TSP & FQR issues closed on time. 6.Service technician Training planning & execution as per HO requirement. 7.Service bulletins preparation & shared with all India service team. 8.Model wise Service BOM preparation with service bill rate. 9.Service spares filled ratio monitoring & achieved as per define target. 10.Export CKD & SKD Spares kit packing with zero discrepancy & packing completion as per stuffing plan. 11.Model wise Service BOM preparation with service bill rate. 12.Service introduction of the newly launched model / product for service spares parts system. Salary: Not Disclosed by Recruiter Industry: Consumer Electronics / Appliances / Durables Functional Area: Other Employment Type: Permanent Job, Full Time',

'2 or more years of professional working experience in 3D Studio Max, Maya, Adobe Photoshop & ZBrush/ 3Dcoat/Substance Painters or any other similar 3D tools. Required skills: Should have good experience of working in Unity3D or any other Game Engines. Expertise in 2D/3D graphic production tools. Knowledge of rendering engines. Be able to rig, model, texture and animate with the direction of other Artists, Art Director, Designer and Producer. Ability to create and adapt to various game art styles. Ability to also work on low poly assets and make beautiful and memory-efficient textures and effects. Ability to translate abstract concepts into impressive on-screen visuals. Efficient and speedy work practices for quick turn-around time under tight deadlines. Excellent interpersonal, writing and communication skills. Please provide a portfolio including example of your work with your application. Desired Skills: Scripting and/or programming experience would be an added advantage. Be able to work well as part of a team. Have excellent organizing skills. Be able to work with minimum supervision. Experience on a few shipped titles, preferably on iOS

and Android. Who you are? You have a passion for Visual Design/Games/AR. You enjoy crafting an entire world from mere 2D sketches. You impart life to characters and give them their distinctive personalities. You lend new dimensions and perspectives to 2D Art. You are an idea person. You are the creative spark that will help people understand their working environments better, learn without risk, introduce gamers the world over to our titles. Virtually create any world you can imagine. What you will do? Create and produce AR 3D artwork in accordance with the direction of other Artists, Art Director, Designer and Producer. Work on art asset integration in Unity 3D. Report status of deliverables to your team, Art Director, Lead, Producer and Development Director. Work within a small, motivated team and communicate effectively. Spearhead, mentor and help artists in the team to attain highest quality art in the allotted production time.\xa0 How we will help you grow? You will be provided with constant learning opportunities. You will have the opportunity to become a AR/VR Technical Artist You can work with our VR/AR research team. You will be provided with all the tools, Books, Online courses, In-house training required to learn and explore new avenues and directions. You will be a part of bi-weekly art challenges to interact with peers and hone your skills. Salary: Not Disclosed by Recruiter Industry: Animation / Gaming Functional Area: Other Employment Type: Permanent Job, Full Time',

     '2nd Engineer', '4th Engineer',

     'A Client of Drishti Consultants Pvt. Ltd.',

     'A leading food & hospitality industry',

     'A renowned name into Security Services !!!',

     'A tele-caller job is basic service to attend calls from Employees and note their problems Calling the new Joiner after 2 to 3 days of Joining for basic Information Informing the reporting manager. Should know Language Telugu, kannada & Hindi. Salary: Not Disclosed by Recruiter Industry: Facility Management Functional Area: Other Employment Type: Permanent Job, Full Time',

     "ACT (Atria Convergence Technologies Ltd.) was born out of a vision to become the most admired in-the-home entertainment, education, Today, we are closer than ever to realising it. Based in Bangalore, we serve a number of cities and towns in Karnataka, Andhra Pradesh, Telangana, Tamil Nadu and Delhi. We are one of the country's most renowned cable and broadband company, bringing state-of the art services to nearly 2 million happy homes: Fibernet (Internet over Fiber Optics) Digital TV HDTV",

     'AGM Data Scientist - Top Durable Brand - Mumbai',

     'AI / ML Data Scientist - Democratize commerce through Technology',

     'AI Developer/ Data Scientist',

     'ANRI SOLUTIONS HR SERVICES PVT LTD - Recruitment Consultancy',

     'AV Editor',

     'AVP - Data Scientist - Top General Insurance Company.',

     'AWS Data Scientist- Exponentia.ai- Mumbai',

     'About Aston Carter: * Aston Carter is a wholly owned subsidiary of Allegis group which is $12.5billion global staffing and recruiting company. * Aston Carter was acquired by Allegis in the year 2011 and expanded to APAC including India in 2017. * Aston Carter focus on recruiting business

professionals across various disciplines like Accounting and Finance, Sales, Operations, Audit, Risk and compliance, and also Banking and financial services * We work with many fortune 500 customers across the globe and currently working with 20+ global clients in India which are predominantly in Banking and financial services sector to name a few, Visa, Morgan Stanley, JPMC, Fidelity, Wells Fargo, Myntra etc * We have 2000 candidates working out of different clients globally and over 100+ in India. * We have our presence in 90+ locations globally and in India we are in Bangalore, Mumbai, Pune, Chennai as well as Hyderabad',

'About TEKsystems:* TEKsystems provides global IT professional recruitment services to help organizations achieve their IT and business goals.*We provide service across Applications, End User Support, IT Leadership, Networks Infrastructure, Project & PMO*$3.8 billion world leader in Technology Staffing Services*Wholly owned subsidiary of Allegis Group, a $11 billion enterprise*6,000+ clients, with 98% client retention*Over 100 locations throughout North America, Europe and Asia*5,000 full time employees*Over 80,000 IT consultants deployed worldwide annually*#1 US Provider of IT Recruitment*Best of Staffing Client Satisfaction and Candidate Satisfaction by Inavero *Forbes America\'s Best Employers list *We have been listed in Fortune Magazine under "100 Best Companies to Work For" for 5 consecutive years*Please visit – www.teksystems.com ; www.allegisgroup.com, for more information on us.',

'Academic Coordinator',

'Accenture (NYSE: ACN) is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions underpinned by the worlds largest delivery network- Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 477,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. IMPORTANT NOTICE We have been alerted to the existence of fraudulent messages asking job seekers to set up payment to cover various costs associated with establishing employment at Accenture. No one is ever required to pay for employment at Accenture. If you are contacted by someone asking for payment, please do not respond, and contact us at india.fc.check@accenture.com immediately.',

'Accessory Designer', 'Account Director',
'Accounts Executive/Accountant', 'Accounts Manager',
'Actuary Manager', 'Administration Services/Medical Facilities',
'Aerial Telecom Solutions Pvt. Ltd.',
'Affiliate Marketing Manager', 'Allegis Group India',
'Allegis Group India is a wholly owned subsidiary of Allegis Group, Inc. In India, the company specifically focuses on dealing with Technology products and providing high-end engineering design and analysis, IT and ITES services,Vendor Management, Training and Staffing services to Fortune 500',

"Allegis Group India is a wholly owned subsidiary of Allegis Group, Inc.

In India, the company specifically focuses on dealing with Technology products and providing high-end engineering design and analysis, IT and ITES services,Vendor Management, Training and Staffing services to Fortune 500 clients. About Allegis Group: A US $6billion world leader in staffing services to over 4000 customers globally World's largest Technology staffing company in the world today IT, Telecom, Infrastructure and Engineering One of the world's largest privately held companies (source: Forbes) The 6th Largest staffing company in the world and the 2nd Largest in the US One of the top vendors to 99% of Fortune 500 companies Employs over 100,000 employees across different parts of the world Operations in North America, Europe and Asia with over 300 offices and now in India",

"Allegis Group India is a wholly owned subsidiary of Allegis Group, Inc. In India, the company specifically focuses on dealing with Technology products and providing high-end engineering design and analysis, IT and ITES services,Vendor Management, Training and Staffing services to Fortune 500 clients.About Allegis Group: A US $6billion world leader in staffing services to over 4000 customers globally World's largest Technology staffing company in the world today IT, Telecom, Infrastructure and Engineering BROne of the world's largest privately held companies (source: Forbes) The 6th Largest staffing company in the world and the 2nd Largest in the US One of the top vendors to 99% of Fortune 500 companies Employs over 100,000 employees across different parts of the world Operations in North America, Europe and Asia with over 300 offices and now in India",

'Anaesthetist', 'Analyst',
'Analytical Chemistry Associate/Scientist',
'Analytical Chemistry Manager', 'Analytics Manager',
'Analyze how our brand is positioned in the market and crystallize targeted consumers insights Take brand ownership and provide the vision, mission, goals and strategies to match up to Translate brand strategies into brand plans, brand positioning and go-to-market strategies Lead creative development and create motivating stimulus to get targeted population to take action Establish performance specifications, cost and price parameters, market applications and sales estimates Measure and report performance of all marketing campaigns, and assess against goals (ROI and KPIs) Coach the team and get the best from everyone Monitor market trends, research consumer markets and competitors activities to identify opportunities and key issues Oversee marketing and advertising activities to ensure consistency with product line strategy Monitor product distribution and consumer reactions Anticipate bottlenecks Brainstorm new and innovative growth strategies Align the company around the brands direction, choices and tactics Salary: INR 8,50,000 – 14,00,000 PA. Industry: Medical / Healthcare / Hospitals Functional Area: Other Employment Type: Permanent Job, Full Time',
'Animation Designer', 'Animation/Graphic Artist',
'Apparel/Garment Designer', 'Architect',
'Area / Territory Manager', 'Area Sales Manager',
'Art Director/Senior Art Director',
'Artificial Intelligence Expert – Data Scientist/ Machine Learning',

'Arts Teacher', 'Asset Manager',
'Asset Operations/Documentation-Executive/Manager',
'Assistant / Associate Marketing Manager',
'Assistant Director/Director', 'Assistant Editor/Editor',
'Assistant Manager/ Manager/ Data Scientist - Python/ Machine Learning',
'Assistant Manager/Manager -(NonTechnical)',
'Assistant Manager/Manager -(Technical)',
'Assistant Manager/Manager-(NonTechnical)',
'Assistant Manager/Manager-(Technical)', 'Assistant Professor',
'Associate Data Scientist',
'Associate Vice President - Data Scientist',
'Associate Vice President - Data Scientist - Iit/nit/iim/xlri',
'Associate/Senior Associate -(NonTechnical)',
'Associate/Senior Associate -(Technical)',
"At TEKsystems, we're obsessed with technology. Its power to change
everything. Technology fuels our passion and commitment to helping organisations
do what they set out to. When we engage, we bring fresh ideas that help you
galvanise your performance. Refine your strategy. Spark new energy. The future-
and how we get there-depends on those who build, connect, create and transform
our world. The most successful and innovative businesses are already doing it,
and we're skilled experts at bringing the talent they need to thrive.",
"At TEKsystems, we're obsessed with technology. Its power to change
everything. Technology fuels our passion and commitment to helping organizations
do what they set out to. When we engage, we bring fresh ideas that help you
galvanize your performance. Refine your strategy. Spark new energy. The future-
and how we get there-depends on those who build, connect, create and transform
our world. The most successful and innovative businesses are already doing it,
and we're skilled experts at bringing in the teams and support needed to
thrive.",
'Audit Manager',
"Aurobindo Pharma Ltd. is a vertically integrated pharmaceutical company
that delivers innovative solutions. From discovery to development to
commercialization, our growth is aided by cost-effective drug development and
substantial manufacturing. Leveraging India's globally competitive cost base and
talented team of scientists, we have successfully launched a range of affordable
products which are accessible across the globe.",
'Azure IoT Data Scientist', 'BDB Data Scientist',
'BI Developer / Data Scientist', 'Back Office Executive',
'Banquet Sales Executive/ Manager',
'Banquet Sales Executive/Manager', 'Bar Manager', 'Bartender',
'Beauty Manager / Beautician', 'Bid Manager', 'Bio-Statistician',
'Bio-Technical Research Associate/Scientist',
'Bio-Technical Research Manager',
'Bio/Pharma Informatics-Associate/Scientist', 'Biology Teacher',
'Branch Manager', 'Branch Manager/Regional Manager',
'Branch Marketing Manager', 'Broker/Trader',
'Business Alliances Manager', 'Business Analyst',

'Business Content Developer', 'Business Development Manager',
'Business Editor', 'Business/EDP Analyst', 'CEO/MD/Director',
'CIO', 'CRM/Customer Service Manager',
'CRM/Phone/Internet Banking Executive',
'CSII - Item and inventory - Senior Data Scientist', 'CSR Manager',
'CTO/Head/VP-Technology (Telecom/ISP)', 'Cabin Crew',
'Cactus Communications is a leading provider of communication solutions,
including academic and scientific editing, medical communications, publication
support services, English-language workshops, transcription, and translation.
Our company mission is to enable growth through effective communication. CACTUS
offers services to two key client segments worldwide: Academia (researchers,
scholarly journals and publishers, universities, and academic societies) and
Pharmaceutical, biotech and medical device companies. We have our offices in the
US, UK, Japan, India, South Korea, Singapore and China. Our full-time in-house
staff consists of over 700 people and represents a diverse group of people from
India, China, Japan, Singapore, South Korea, Taiwan, the US, UK, Germany, and
Brazil. We also work with over 2500 contractors from around the world. We\'ve
been ranked #1 in IndiaÃ¢â¬â„¢s Great Mid-Size Workplaces Ã¢â¬" 2017, a study
conducted by Great Place to WorkÃ¸Â® Institute India in association with MINT,
by HT Media: http://bit.ly/2uiJmUv. WeÃ¢â¬â„¢ve been ranked #18 in 25 Best
Small & Medium Workplaces in Asia Ã¢â¬" 2018, a study conducted by Great Place
to WorkÃ¸Â® Institute We are proud to finish in the 2018 Top 100 Companies for
Remote Jobs by FlexJobs! This is the third year for CACTUS to finish in the top
20.',
'Camera Man/Technician', 'Captain', 'Cardiologist',
'Cards-Operations Manager', 'Cards-Sales Officer/Executive',
'Carry Forward Agent (CFA)', 'Cashier',
'Centre Head / Branch Head / Club Manager', 'Chancellor',
'Chartered Accountant', 'Chef De Partis',
'Chemical Research Associate/Scientist',
'Chemical Research Manager', 'Chemistry Teacher', 'Chief Engineer',
'Chief Medical Officer/Head Medical Services',
'Chief of Bureau/Editor in Chief',
'Civil Engineer-Highway/Roadway',
'Civil Engineer-Land Development', 'Civil Engineer-Municipal',
'Civil Engineer-Telecom', 'Civil Engineer-Traffic',
'Civil Engineer-Water/Wastewater', 'Claims Executive',
'Class Teacher / Classroom coordinator', 'Clearing Officer',
'Client Relationship Manager', 'Client Servicing Executive',
'Client Servicing/Key Account Manager',
'Clinical Research Associate/Scientist',
'Clinical Research Manager', 'Clinical Researcher',
'Co-founder & Chief Data Scientist/senior Data Scientist',
'Collections Executive', 'Collections Manager',
'Collections Officer', 'Commercial Artist', 'Commercial Manager',
'Commis',
"Company Profile Cholamandalam MS General Insurance Cholamandalam MS

General Insurance Company Limited is a Joint Venture between the Murugappa Group and Mitsui Sumitomo Insurance Company Limited, Japan. Chola MS offers a wide range of insurance products that includes Accident, Engineering, Health, Liability, Marine, Motor, Property, Travel and Rural insurance for individuals and corporates. Chola MS champions a brand philosophy called T3, which stands for Trust, Transparency and Technology. It has also been consistently recognised and awarded by the Government of India, international entities and ratings agencies for its insurance service and delivery innovations. The company has 109 branches and over 9000 agents across the country. The Company achieved a Gross Written Premium (GWP) of Rs. 31,333 million registering a robust growth rate of about 28% over the previous year. The Company's market share as at March 31, 2017 was 2.76% (among general insurance companies).The growth was driven by new partnerships secured during the year and strong growth achieved in proprietary channels. Together with investment income, the Company recorded its highest ever operating profits. Profit before tax increased from Rs. 2,131 million to Rs. 2,971 million for the year ended March 31, 2017.",

"Company Profile Hari Darshan Sevashram (P) Ltd Hari Darshan Group is one of the largest manufacturers of Dhoop, Agarbathies, Pooja Products and Home Fragrances. The brand has been a household name across india over last many decades. Hari Darshan offers Professional, Ethical & Secure work environment for it's employees couples with career growth prospects. For more details about company you can log on to- www.haridarshan.com www.risingsun.in www.inatur.in",

'Company Secretary', 'Computer Teacher',
'Con - Big Data Analytics + Data Scientist',
'Construction-Construction Management',
'Construction-General Building', 'Construction-Heavy',
'Construction-Residential', 'Construction-Specialty',
'Consultant - Data Scientist', 'Consulting', 'Content Developer',
'Copywriter', 'Corporate Advisory Manager',
'Corporate Communication Executive',
'Corporate Planning/Strategy Manager',
'Correspondent/Assistant Editor/Associate Editor',
'Cost Accountant', 'Counselor', 'Counter Sales',
'Creative Director', 'Credit Analyst-Corporate Banking',
'Credit Manager-Corporate Banking', 'Credit Officer',
'Credit/Control Executive', 'Credit/Control Manager',
'Cuelogic Technologies hiring Data Scientist with Healthcare domain exp',
'Currently we are having an opportunity with one of the leading Bank , for the role into Inbound Customer Executive for Credit Cards. Location- Delhi NCR Experience- 2 to 5 Years Education- Any Graduate Salary: INR 2,25,000 – 5,00,000 PA. Industry: Banking / Financial Services / Broking Functional Area: Other',
'Curriculum Designer', 'Customer Service Executive',
'Customer Service Manager', 'Customer Support Engineer/Technician',
'Cynosure Corporate Solutions is a human capital services company. Executive Search | Recruitment | Staffing services | Training | HR aligned services.',

'DATA SCIENTIST', 'DATA SCIENTIST (Analytics Technology)',
'DATA Scientist- (H/ F)', 'DBA',
'DEPARTMENT : Solid Oral - Manufacturing SECTION : Granulation /
Compression / Coating DESIGNATION : Officer / Senior Officer / Executive
EXPERIENCE : 3 To 8 Years QUALIFICATION : B.Phrmacy / M.Pharmacy JOB LOCATION :
Intas Pharmaceuticals Limited - SEZ Unit (Ahmedabad) JOB RESPONSIBILITY : Should
be well versed with Tablet Compression, Granulation, Coating & Dispensing
activities. Should have adequate knowledge on requirement of MHRA, USFDA and
other regulatory bodies. Should be able to handle manpower efficiently. Should
be able to do documentation work independently. Knowledge of SAP will be an
added advantage. Salary: Not Disclosed by Recruiter Industry: Pharma / Biotech /
Clinical Research Functional Area: Other Employment Type: Permanent Job, Full
Time',
'DESIGNATION \xa0- Associate Manager- P&S DOMAIN KNOWLEDGE \xa0- Trade
finance domain expertise with respect to following products : -Letter of Credit
-Letter of Guarantee -Import Collection -Export Collection -Bank Guarantee
-Standby LC -Open account Trade services -Bill of Lading -Bill of exchange JOB
DESCRIPTION \xa0- The broad responsibilities include: -Proactively looking for
creative ways to position Newgens Solution by incorporating specific
industry/domain expertise and business/functional knowledge. -Working closely
with sales team to provide clarifications and answers to customer queries
requiring deep product expertise on timely manner. -Carrying out Proof of
Concepts to demonstrate how Newgens solution could meet customer requirements
and deliver values. -Ensure compliance to System and Processes such as legal &
commercial terms, Proposals, RFPs, RFIs, BOM etc. -Giving demos of Newgen
products and solutions and creating proof of concepts. -Developing and
maintaining comprehensive knowledge of Newgens products and similar competitive
products to effectively compares/competes and position Newgen. EXPERIENCE \xa0-
2-4 Years SKILLS REQUIRED \xa0- You should be a B.E/B. Tech. or MBA from a
reputed institute, with 2 to 4 years of experience as system analyst or solution
consultant on Trade Finance domain. You must have: -Understanding of the
software product market dynamics and software development processes. -Possess
excellent relationship, communication and customer relationship management
skills. -Exhibit strong leadership qualities through quick decision-making and
change management & strong analytical ability. -Good experience in Ms-Office and
documentation skills. Willingness to travel. Location: \xa0Mumbai\xa0 Salary:
Not Disclosed by Recruiter Industry: IT-Software / Software Services Functional
Area: Other Employment Type: Permanent Job, Full Time',
'DISYS Chennai hiring For Data Scientist', 'Data Analyst',
'Data Analyst / Data Scientist - C++/c#/java',
'Data Analyst/ Data Scientist at NKP Goregoan, Mumbai in MNC Bank',
'Data Engineer', 'Data Science/ Scientist - Python/ Deep Learning',
'Data Scientist', 'Data Scientist & Software Engineer',
'Data Scientist (Virtual/ Work from Home)',
'Data Scientist (Intern)', 'Data Scientist (Internship)',
'Data Scientist (Jr. Resource)', 'Data Scientist (lead)',
'Data Scientist (ml/nlp) - (iit/nit/bits)', 'Data Scientist -',

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'Data Scientist - AI + ML - Bpo/kpo',
'Data Scientist - Advanced Analytics',
'Data Scientist - Analytics', 'Data Scientist - Analytics - BFS',
'Data Scientist - Analytics Division - Tech Service Provider Firm',
'Data Scientist - Analytics Product',
'Data Scientist - Artificial Intelligence/ Machine Learning',
'Data Scientist - Bangalore MNC - C2H - Webex Interview',
'Data Scientist - Big Data',
'Data Scientist - Credit Risk Analysis - Fintech - IIT/ IIM/ Bits/ NIT',
'Data Scientist - Delhi (automobile OEM)',
'Data Scientist - ETL/ Analytics',
'Data Scientist - Ecommerce & Product Development - Iit/nit/iisc/iiit',
'Data Scientist - Fintech Credit Analytics Product Startup (bangalore)',
'Data Scientist - Fintech Startup',
'Data Scientist - Fintech Startup - IIT/ IIM/ Bits/ NIT',
'Data Scientist - Hadoop/mapreduce', 'Data Scientist - IT',
'Data Scientist - Image Processing/machine Learning',
'Data Scientist - Image Recognition/ Machine Learning',
'Data Scientist - Image Recognition/Machine Learning',
'Data Scientist - Image Recognition/machine Learning',
'Data Scientist - Intern', 'Data Scientist - Machine Learning',
'Data Scientist - Machine Learning & Statistical Analysis - R/python',
'Data Scientist - Machine Learning - Ecommerce',
'Data Scientist - Machine Learning - Ecommerce/ Internet - PhD',
'Data Scientist - Machine Learning/ Deep Learning - BFS',
'Data Scientist - Machine Learning/ NLP',
'Data Scientist - Machine Learning/ NLP/ Tensorflow',
'Data Scientist - Machine Learning/ Predictive Modeling',
'Data Scientist - Machine Learning/Python',
'Data Scientist - Machine Learning/artificial Intelligence',
'Data Scientist - Machine Learning/deep Learning',
'Data Scientist - Machine/deep Learning Algorithms',
'Data Scientist - Manufacturing/r&d/engineering',
'Data Scientist - NLP/ Machine Learning',
'Data Scientist - Nlp/r/python', 'Data Scientist - Python/ SQL',
'Data Scientist - Python/Pandas/Numpy',
'Data Scientist - Python/pandas/ Numpy',
'Data Scientist - Python/r',
'Data Scientist - Python/r, Ai/ml, NLP',
'Data Scientist - Python/sas/r',
'Data Scientist - Python/sas/r - Analytics Center of Excellence',
'Data Scientist - R Programming + SQL - KPO',
'Data Scientist - R/ SQL/ Python',
'Data Scientist - R/ Spss/ Python',
'Data Scientist - R/spss/python',
'Data Scientist - Remote ( Part Time, Full Time ) - WFH',
'Data Scientist - SAS/ SQL/ SPSS', 'Data Scientist - SaaS',
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'Data Scientist - Sas/sql/spss', 'Data Scientist - Sr. Analyst',
'Data Scientist - Telecom - IIM/ IIT/ Bits/ NIT/ FMS/ MDI',
'Data Scientist -Technology', 'Data Scientist / Analyst',
'Data Scientist / Business Analyst',
'Data Scientist / Senior Data Scientist',
'Data Scientist / Senior Data Scientist / NLP Data Scientist',
'Data Scientist Analytics-Text Analytics Expert- - Analytics Vidhya',
'Data Scientist Delivery Lead',
'Data Scientist Embedded Systems Innovation',
'Data Scientist For Leading Malaysian Retai Bank -work In Kuala Lumpur',
'Data Scientist For Product based MNC in Bangalore',
'Data Scientist For Trivandrum', 'Data Scientist III',
'Data Scientist Intern Rigbot',
'Data Scientist Lead - Machine Learning', 'Data Scientist Level I',
'Data Scientist Opening with Top Healthcare organization For Bangalore',
'Data Scientist Operational Research',
'Data Scientist Rasa Chatbot Developer',
'Data Scientist and Data Engineer',
'Data Scientist with top Fintech Startup Company',
'Data Scientist | Integreon Managed Solutions | Mumbai',
'Data Scientist(Till covid remote Work available)',
'Data Scientist, Data Science Engineer Required with our Clients',
'Data Scientist, Machine Learning & AI Openings with our Clients',
'Data Scientist, Machine Learning Exp req', 'Data Scientist, NLP',
'Data Scientist, Pratham Digital', 'Data Scientist- Clevertap',
'Data Scientist- NLP/Deep Learning- Mumbai (5+ years).',
'Data Scientist/ Academic Counselor',
'Data Scientist/ Analyst - Machine Learning/deep Learning',
'Data Scientist/ Decision Science-analyst',
'Data Scientist/ Senior Data Scientist - CPG Domain',
'Data Scientist/Data Analyst/Data Engineering',
'Data Scientist/Data Science',
'Data Scientist/Data Science/ Data Science Lead',
'Data Scientist/ML Engineer (Work from Home)',
'Data Scientist/ml/dl/python/timeseries',
'Data Scientist/python Application Engineer', 'Data Scientists',
'Data Scientists and Programmer', 'Data scientist',
'Data scientist / Developer', 'Data scientist visualization',
'Database Architect/Designer', 'Datawarehousing Technician',
'DaycareTeacher / Incharge / Attendant', 'Dean / Director',
"Dear Candidate\xa0 Greetings from IndiaMART Company Profile: IndiaMART
is India's largest online B2B marketplace, connecting buyers with suppliers.
With 60% market share of the online B2B Classified space in India, the channel
focuses on providing a platform to Small & Medium Enterprises (SMEs), large
enterprises as well as individuals. Founded in 1999, the company's mission is to
make doing business easy.\xa0 \xa0 IndiaMART offers a platform to 5.98 Crore
buyers to search from over 5.01 crore products and get connected with over 47

lakhs reliable and competitive suppliers.\xa0 IndiaMART has been the proud recipient of the Red Herring 100 Asia Award in 2008, as one of the top promising Asian companies driving the future of technology. Led by innovation and backed by experience, the company introduced a pioneering service in 2012 called Buy Leads. The commitment to bring affordable and low-cost solutions to the SMEs laid the foundation for this low-cost solution, which was bestowed with the Manthan Award in 2013 under the E-business and Financial Inclusion Category. IndiaMART has over 2500 employees located across 76 offices in the country. We look forward to having you as a part of the team. Job Description:\xa0 Handling and integrating large volumes of data from various sources. Business performance analysis and reporting :\xa0 Analyzing the KPIs on a regular basis to monitor the health of business and related reporting to the Top Management Preparing quarterly & Monthly decks and getting the same reviewed to the top management. Annual/Monthly Plans with Business Strategies To be a core member in formulating and driving the freezed plans for all business verticals. Variance analysis :\xa0 Analyzing the variances against past performance and Planned and identifying the reasons for deviation. Responding to management queries on various key business issues and driving the changes required in business processes. Keep a close eye on all Key Business Metrics and do a root cause analysis in case of any significant spike/dip in any KBM Developing and communicating key metrics and business trends to various teams Help in planning (daily / weekly / monthly / quarterly / annual) by providing data driven insights Mining data, performing analysis, coming up with actionable insights, creating dashboards and presentations Necessary Skills: Analytical thinking; comfortable handling numbers and data. Self-motivated ability to close action items without much supervision. Ability to communicate well with different stakeholders. Good Command On Excel ++ Basic knowledge required for VBA/SQL & BI Tools. Salary: INR 5,00,000 - 6,00,000 PA. Industry: Internet / Ecommerce Functional Area: Other Employment Type: Permanent Job, Full Time",

    'Dear all, Urgent vacancy at Fortis Hospital Mulund, Mumbai for Interventional Paediatric Cardiologist. Qualification - MBBS, DCH(Paediatric), DNB(Paediatric), FNB(Peadiatric Cardiology) Experience - 0-4 Yrs Interested candidates can share their resume on rahul.narkar@fortishealthcare .com or can call us on 02249254263/02249254292 Salary: Not Disclosed by Recruiter Industry: Medical / Healthcare / Hospitals Functional Area: Other Employment Type: Full Time, Permanent',

    'Debt Analyst', 'Debt Instrument Dealer', 'Deck Cadet',
    'Depository Services-Executive/Manager', 'Derivatives Dealer',
    'Dermatologist', 'Design Engineer', 'Design Engineer/Manager',
    'Design, plan, organize and execute the job assigned and area allotted for effective referral sales of hospital services, facilities and modern technology to doctors, consultants and clinics. Develop and stabilize good and meaningful relationship with consultants, doctors, hospitals and clinics. Forward the report weekly to the Manager and get the feedback. Act as a communication channel between doctors and hospital Salary: Not Disclosed by Recruiter Industry: Medical / Healthcare / Hospitals Functional Area: Other Employment Type: Permanent Job, Full Time',

'Designation: Collection Manager / Officer - CD/TW. Location: Ahmedabad / Surat / Rajkot Job Requirement: Candidate should have minimum 1 to 2 years of experience into collections. Should have managed Collection agency. Ready to work in field for collection Salary: INR 2,00,000 - 5,00,000 PA. Industry: Banking / Financial Services / Broking Functional Area: Other Employment Type: Full Time, Permanent',
      'Dev - Data Scientist',
      'Developers, Data Scientists, Web Designers, Android Developers',
      'Dietician/Nutritionist', 'Direct Marketing Executive',
      'Direct Marketing Manager', 'Display Marketing Executive',
      'Display Marketing Manager', 'Documentation/Medical Writing',
      'Documentation/Shipping-Executive/Manager',
      'Domestic Private Banking-Executive/Manager', 'Draughtsman',
      'Drug Regulatory Director', 'EA to Chairman/President/VP',
      'EDP Analyst', 'ENT Specialist', 'ERP Consultant',
      'EXL (Nasdaq:EXLS) is a leading business process solutions company that helps companies drive business impact and adapt faster to the changing global marketplace. EXL provides operations management, embedded analytics and technology platforms to organizations in the banking and financial services, healthcare, insurance, utilities, transportation and logistics, and travel industries. With more than 21,000 people around the world, we work with our clients as strategic partners to execute operations, identify opportunities to gain a competitive edge, and create new channels for growth and savings. Headquartered in New York and operational since 1999, EXL is present in the U.S., U.K., Singapore, Romania, the Philippines, India, Germany, Czech Republic and Bulgaria. For more information, visit www.exlservice.com.',
      'Electrical Engineer-Commercial', 'Electrical Engineer-Industrial',
      'Electrical Engineer-Telecom', 'Electrical Engineer-Utility',
      'Email Marketing Manager', 'Embedded Technologies Engineer',
      'Employee Relations Executive', 'Employee Relations Manager',
      'Engaging with the senior leadership and middle management of the Tax and advisory functions in the region. Working on e-tds return, tax clearance preparation, TEQ preparation, counselling minutes notes preparation, tax return, PAN application and technical research. Ensuring transition plans and migration resources are in place, SLAs are agreed and service delivery is maintained during the transition Supporting the development of ramp-up plans and building of profiles on basis of service line demands Managing and resolving escalations that have impact on critical path of service delivery Taking regular feedback from client service teams on services delivered from ICoE Reviewing performance of ICoE against agreed KPIs and their compliance to SLAs and reverse SLAs at regional leve Promoting a KPMG centric and partnership approach to develop strong relationships with other working groups and ensure adherence to Group governance Monitoring the reports being sent regarding ICoE performance Exceptions Handling and Reporting - Perform Root cause analysis for low CFT score or SLA non-compliance and take corrective action Interested Candidates can share their their resume on reetisingh@kpmg.com Salary: INR 8,00,000 - 9,00,000 PA. Industry: Other Functional Area: Other Employment Type: Permanent Job, Full

Time',
        'Engineering Manager', 'English Teacher',
        'Ensuring that patient care instrument used throughout the Fortis
Hospitals Ltd. is safe. Effectively manage and coordinate activities of the
Biomedical Engineering Department to include the evaluation, replacement,
service and repair of complex biomedical patient equipment; administer policies
and procedures applicable to efficient operations. To provide necessary support
to the Doctors / Nursing Staff / Operators in terms with equipments usage.
Direct all aspects of maintenance, and repair of the equipment, as well as
ongoing training and education of staff related to safe medical device uses and
practices. Provide first hand support to the medical equipments during their
breakdown and normal maintenance. Direct and manage preventive maintenance on
medical equipment, through adjustment or replacement of items on a scheduled
basis to prevent equipment failures. Upkeep all equipment to its proper and
uninterrupted working performance by planned and scheduled preventive
maintenance program. Ensure the patient safety and result accuracy by measures
like periodic calibration, periodic safety checks etc. Provide on job training
and support to the equipment users and operators. Coordinate with the agencies
for spares and service support. Establish and implement technical protocols and
management functions pertaining to biomedical equipments. Advice administration
on matters pertaining to equipments purchase, performance, financial provisions
etc. Establish and define departmental goals and objectives to meet goals and
objectives of Fortis Hospital. Plan, implement and evaluate programs to meet
departmental goals. Salary: INR 1,75,000 - 3,00,000 PA. Industry: Medical /
Healthcare / Hospitals Functional Area: Other Employment Type: Full Time,
Permanent',
        'Environment Engineer/Officer',
        'Equipment installation, calibration, validation and maintenance.
Maintain the master list for preventive maintenance and calibration of GLP AND
NONGLP Instruments Preparing the IQ,OQ,PQ Documentation for new equipment during
installation Attend and rectifying the CENTRIFUGE,CO2 INCUBATOR ,HPLC,
CENTRIFUGE, CELLCOUNTER, HPLC, ROTAVAPORS, INCUBATORS, WATER PURIFICATION
SYSTEMS, FPLC breakdown issues Attend and rectifying the HPLC breakdown issues
Coordinating with Vendors, Projects team, Validation team and end-users for
installation and qualification (IQ, OQ and PQ) of all the Biologics department
equipment. Zero down time maintenance of all laboratory department equipment.
Maintaining stock of equipment accessories, spares and consumables as per
requirement. To assist, attend and Execute Preventive Maintenance/Breakdown
Maintenance for Various Biology and Analytical equipment. Attend breakdown
Maintenance calls and Perform routine Preventive Maintenance for Instruments
like CENTRIFUGE, CELLCOUNTER, HPLC, ROTAVAPORS, INCUBATORS, WATER PURIFICATION
SYSTEMS, HEATING STIRRERS, FLASH CHROMATOGRAPHY SYSTEMS AND VARIOUS BIO-
ANALYTICAL INSTRUMENTS IN JUBILANT BIOSYS. Working with Scientists to ensure
smooth running of the Equi Salary: Not Disclosed by Recruiter Industry: Pharma /
Biotech / Clinical Research Functional Area: Other Employment Type: Full Time,
Permanent',
        'Equity Analyst', 'Equity Manager', 'Events/Promotion Executive',

'Events/Promotion Manager',
        'Excellent Opp For Data Scientist For Bangalore with top Healthcare Org',
        'Excellent Opportunity- Data Scientist @ Mumbai',
        'Executive Sous Chef/Chef De Cuisine',
        'Executive/ Sr Executive - Administration',
        'Executive/ Sr Executive - Facility Management',
        'Executive/Master Chef',
        'Exigent Group Limited is a global legal services outsourcing
organization, providing advice and delivering a range of legal services,
contract management solutions and business analytical tools aimed at reducing
risk, improving compliance and driving process and cost efficiencies for clients
in the US, Canada, UK, Australia and South Africa.',
        'F&B Manager', 'Factory Head', 'Fashion Content Developer',
        'Fashion Editor', 'Features Content Developer', 'Features Editor',
        'Finance Executive', 'Finance/Budgeting Manager',
        'Financial Accountant', 'Financial Analyst',
        'Fitness Trainer / Gym Instructor', 'Footwear Designer', 'Ford',
        'Forex Dealer', 'Forex Manager', 'Formulation Scientist',
        'FourEn is a technology partner company headquartered in Bangalore,
India. FourEn is Driven by strong passion and an indomitable spirit to deliver
value in the field of IT outsourcing and technology services',
        'Freelance Journalist', 'Freelancer', 'French Teacher', 'Fresher',
        'Freshers',
        'From Patient-to-Payment,â„\xa0 nThrive empowers health care for every
one in every community.â„\xa0 We transform financial and operational performance
to enable health care organizations to thrive. We integrate our knowledge and
advisory services across the entire revenue cycle and we are accountable to our
clients - not payor or provider owners - ensuring unbiased and focused health
solutions that best meet their needs.',
        'Front Desk/Cashier/Billing',
        'Front Office/Guest Relations Executive/Manager',
        'Full Stack Data Scientist', 'Functional Outside Consultant',
        'Fund Manager-Debt', 'Fund Manager-Equity',
        'G-Cube is the one of the forward looking and growing e-learning
organization Head Quartered in India, with sales and marketing office in
California, US and Ontario, Canada. G-Cube is an ISO 9001:2000 certified
organization and is working towards achieving CMMi Level 3 Certification. G-Cube
serves global organizations with its best of the breed services and has been
awarded with Deloitte Technology Fast 50 India Ã¢â‚¬" 2009 award. Please visit
the following link to know about few of our clients: gc-
solutions.net/clientlist.asp G-Cube offers range of e-learning services both for
online as well as classroom based learning delivery. Our services include
advisory, custom courseware design / development and Instructional Design.
G-Cube believes in individual self development through knowledge development. We
have a well established knowledge sharing process through our internal and
external Blog. To know more please visit: gc-solutions.net/blog',
        'GD Research Center Pvt. Limited (GDRC) is a subsidiary of GlobalData

Ltd, UK. GlobalData is the premier source of actionable insight into the energy and healthcare industries. With the combined expertise of more than 1,000 researchers, market analysts and consultants across 10+ countries, the company provides high-quality, accurate and transparent industry insight that helps clients achieve growth and increase business value. GlobalData’s success as a leading research and consulting firm is also highlighted by the fact that it is frequently referenced in some of the world’s leading publications, such as the Wall Street Journal, The Washington Post, Forbes, the Financial Times, Bloomberg and Reuters. In addition to this, it has also been named one of the UK’s most inspiring companies, after being listed in the London Stock Exchange Group’s recent report, “1000 Companies to Inspire Britain”. GDRC itself has an experienced team of more than 800 researchers, analysts and software professionals based in Hyderabad, India, with diverse industry and educational backgrounds. GDRC hires its employees from educational institutes of global repute, enabling the company to provide high-quality research and analysis. GDRC’s team uses robust methodologies, including in-depth primary and secondary research techniques, proprietary databases and input from panels of industry experts, to deliver its leading research and analysis. In addition to this, GDRC has a highly experienced senior management team, consisting of leading figures in the business information industry. Why not find out more about GlobalData and GDRC via the links below: www.globaldata.com www.gdresearchcenter.com',
        'GSM Engineer', 'General Manager', 'General Practitioner',
        'Germany MNC Looking For Data Scientist',
        "GlaxoSmithKline is one of the world's leading pharmaceutical and healthcare companies, with statisticians and programmers working at UK and US R&D sites, and worldwide. In recognition of the developing sophistication and technical requirements of the programming role, the Clinical Programming department was formed as a standalone department within the broader Clinical Statistics group 18 months ago, covering all phases of clinical drug development and commercialization in a wide range of therapeutic areas. In addition to the group's activities supporting GSK's pipeline of drugs, key accountabilities include driving CDISC implementation for the reporting of clinical trials, and identifying and implementing technology solutions to offer further benefit and efficiency for the group's activities.",
        'Graphic Designer', 'Graphic/Web Designer', 'Ground Staff',
        'Guest Service Agent', 'Gynaeocologist', 'HOD',
        'HR Business Partner', 'HR Executive', 'HR Manager',
        'Hair Stylist', 'Hardware Design Engineer',
        'Hardware Installation Technician', 'Head / VP / GM-Taxation',
        'Head / VP/ GM/ National Manager After Sales',
        'Head Nurse / Nursing Superintendent / Clinical Instructor',
        'Head Nurse/Nursing Superintendent/Clinical Instructor',
        'Head Teacher / Head Mistress / Head Master',
        'Head/Manager/GM-Media Planning',
        'Head/VP-Public Relations/Corporate Communication',
        'Head/VP/GM - Analytics & BI', 'Head/VP/GM-Accounts',

'Head/VP/GM-Administration & Facilities', 'Head/VP/GM-Broking',
'Head/VP/GM-CFO/Financial Controller',
'Head/VP/GM-Client Servicing', 'Head/VP/GM-Commercial',
'Head/VP/GM-Compensation & Benefits',
'Head/VP/GM-Corporate Advisory',
'Head/VP/GM-Corporate Planning/Strategy', 'Head/VP/GM-Credit Risk',
'Head/VP/GM-Documentation/Shipping', 'Head/VP/GM-Finance/Audit',
'Head/VP/GM-HR', 'Head/VP/GM-Investment Banking',
'Head/VP/GM-Legal', 'Head/VP/GM-Marketing',
'Head/VP/GM-Mergers & Acquisitions', 'Head/VP/GM-Operations',
'Head/VP/GM-Private Equity/Hedge Fund/VC', 'Head/VP/GM-Production',
'Head/VP/GM-Production/Manufacturing/Maintenance',
'Head/VP/GM-Project Finance',
'Head/VP/GM-Public Relations/Corporate Communication',
'Head/VP/GM-Purchase/Material Management', 'Head/VP/GM-Quality',
'Head/VP/GM-Quality Assurance & Quality Control',
'Head/VP/GM-Quality Assurance/Quality Control', 'Head/VP/GM-R&D',
'Head/VP/GM-Recruitment', 'Head/VP/GM-Regulatory Affairs',
'Head/VP/GM-Relationships', 'Head/VP/GM-SCM/Logistics',
'Head/VP/GM-Sales', 'Head/VP/GM-Taxation',
'Head/VP/GM-Technical Support', 'Head/VP/GM-Technology(IT)/CTO',
'Head/VP/GM-Tour Management', 'Head/VP/GM-Training & Development',
'Head/VP/GM-Transitions', 'Head/VP/GM-Underwriting',
'Head/VP/GM/ Mgr-Online/Digital Marketing',
'Head/VP/GM/National Manager -Sales',
'Head/VP/GM/National Manager-Sales',
'Health Club Assistant./Manager', 'Hepatologist', 'Hindi Teacher',
'Hiring Data Scientist', 'Hiring Data Scientist - Pune',
'Hiring Data Scientist / Sr. Data Scientist',
'Hiring For Data Analyst/ Data Scientist For an Organisation in Delhi',
'Hiring For Data Scientist',
'Hiring For Data Scientist - Freelancer',
'Hiring For Data Scientist-research and Analyst, Kalyani Nagar, PunR',
'Hiring For Data Scientists 4-8 Years Experience',
'Hiring for Logistics company', 'Host/Hostess',
'Hotel Seven Seas, an extraordinary symbol of chic, opulence and
sophistication, provides a signature experience to cherish for a lifetime with
its classic European architecture and avant-garde design. Started in 1995, Seven
Seas Hospitality owns and operates four banquet halls in Delhi and has been
recording an annual growth of 20-30 per cent year-on-year. Located 22 km from
Indira Gandhi International Airport, 16 km from New Delhi Railway Station and 12
km from Central Delhi, Hotel Seven Seas is a premier luxury destination and the
perfect choice for business and social events. The property will boast of total
meeting space of 1,00,000 sq ft area, which can accommodate upto 4000 guests, 3
Lavish Banquet Halls and Rooms in size options from 15000 sq ft to 25000 sq ft 2
two nightclubs, a shopping complex of 6000 sq feet, an all-day dining multi
cuisine restaurant and a specialty restaurant cum bar. Other facilities will

include a health club, steam, sauna, Jacuzzi and swimming pool. The group is
also exploring the possibility of opening another hotel, post the completion of
this ambitious project, in Gurgaon by 2016. However, this is still under
planning stage. The brand new luxury Hotel Seven Seas has over 100 contemporary
designed well appointed rooms. All our rooms come with luxurious plush beddings,
upgraded bath amenities; Flat screen Television, spacious work areas with high
speed Internet Access,',
        'Housekeeping Executive/Assistant.', 'ICWA',
        'IQM - Data Scientist', 'IT/Networking-Manager',
        'IT/Technical Content Developer', 'IT/Technical Editor',
        'Immediate Requirement For Data Scientist', 'Industrial Engineer',
        'Industrial/Labour Relations Manager',
        'Infosys is a leading provider of next generation consulting, technology
and outsourcing solutions. We are dedicated to help organizations build
tomorrows enterprise and advance the way the world works that is why Forbes
ranksus 19th among the top 100 most innovative companies. Our employees partner
with clients to transform thier business one conversation one idea one insight
at a time. While we are at it some things remain unchanged theunwavering ethics
transparency and respect behind everything we do. We will always be a company
powered by intellect and driven by values. So if your passion is to build
solutions that really make a diffrence to enterprisesthe community and your
world Infosys is the right palce for you.',
        'Infrastructure & Technology Manager', 'Instacar - Data Scientist',
        'Institutional Sales/Business Development Manager',
        'Instructional Designer', 'Insurance Advisor', 'Insurance Analyst',
        'Insurance Operations Manager', 'Insurance Operations Officer',
        'Interaction Designer',
        'Interaction with the patients Explaining the procedures of dialysis and
all its aspects. Preparing the Database and introduce to the respective
Consultants for the procedures. Keep necessary equipments ready for starting and
termination procedures of dialysis. To maintain equipments before and after the
procedures. Disinfect the machine and reuse the dialyzers and the accessories.
Putting indent and IP issues. Sending M.I.S. Assist doctors in all procedures (
IJ and Femoral Catheterisation) Taking inventory regularly. Keep a track of the
accessories. Know all preventive maintenance program, in accordance to SOPs to
maintain all my equipments in proper condition. Salary: INR 2,00,000 - 3,50,000
PA. Industry: Medical / Healthcare / Hospitals Functional Area: Other Employment
Type: Permanent Job, Full Time',
        'Interior Designer', 'Intern', 'International Marketing Manager',
        'Investment/Treasury Manager',
        'Investor Relationship-Executive/Manager', 'Jewellery Designer',
        'Job Description About Line of Business: GFIC Global Finance Information
Center is the Line of Business which is the Captive division of Oracle which
takes care of the Entire Order to Cash function for Oracle Hardware and Software
products. There are many processes with GFIC OA (Order Administration), PA
(Project Accounting), AR (Accounts Receivables), AP (Accounts Payable), DM
(Customer Data Management), Stock, Collections and many other Sub processes

Understanding on Order to Cash 1) Contract Management This Team helps in Signing up Legal Agreements with the Customer post the customer agreeing to Buy product from Oracle. 2) Customer Agreements This team helps in Creating Customer details and records and Reporting / Non Revenue Orders 3) OA (Order Administration) This Books the Order of the Customer 4) AR This Team raises the Invoices and send them to the customer 5) Collections This Team follows-up on the invoices and get the payment from the customer Please find a brief description about the team : DM Team process summary as below: The Deal Management Services (DM) Team is responsible configuring products with appropriate pricing & discounts and creating contract documents for Customers who are buying Oracle products. The team needs to liaise with internal functions like Sales, Product Release groups, local Deal Management teams and Global process Owners, to be able to produce the right product pricing and clauses in accordance with Oracles Global Approval Matrix. An integral aspect for the team is to enable Sales to delivery accurate and timely inputs to the customer with faster turnaround to facilitate revenue velocity. The team also works with downstream booking processes to seamlessly handhold the entry of such records into Oracle systems post the customer agrees to buy our products. This team works Globally and is responsible for Hardware, Cloud and Software line of businesses. Its falls under the gamut of Order Management of our captive unit (GFIC - Global Finance Information Center) Position: Senior/Lead Analyst Job Location : Bangalore Responsibilities Assemble and draft contract documents, supporting assigned Oracle line of business, country, or sales organization, following Oracles global contract process and use appropriate tools and systems Review transactional approvals/executive summaries to ensure appropriate business approvals are secured for any non-standard contract options per the relevant Oracle Global Approval Matrix Review the Partner or Customer Master Agreement to ensure it is valid for the current transaction and meets define Oracle standards Engage, per pre-defined guidelines, with Sales and other cross-functional/Internal teams on nonstandard contract terms Receive and Review customer-executed documents, and perform a thorough validation. Manage Sales and Customer expectation on time-to-completion for a given transaction request Desired Skills and Experience Very good communication skills, both written and verbal Ability to work effectively under time critical deadlines. Ability to effectively manage multiple tasks and priorities, and attention to detail Ability to adapt and acquire new skills quickly Ability to work in a high pressured, fast moving and challenging environment Organized and detail oriented. Would be a plus having: Good customer focus skills Would be a plus having: Proven experience in handling contractual documents Candidate should have 5-10 years of professional experience and possess knowledge of Quote or Order(Q2O) or Order to Cash(O2C) or Deal Management Experience. Have openings at different levels If interested pls send your resume to poonam.g.gupta@oracle.com with details like current ctc/expected ctc and notice period Thanks Poonam Salary: Not Disclosed by Recruiter Industry: IT-Software / Software Services Functional Area: Other Employment Type: Permanent Job, Full Time',

"Job Description PO Operations Analyst:- Responsible for creation of Purchase requests and working with the Source-to-Settle/Procurement team and

Business teams to get Purchase Orders created. Also responsible for getting invoices paid on time. . Follow the PO responsibility matrix and workflow. Review SOW / Contracts/ Engagement Letter and ensure that these documents adhere to Oracle's Standard template, terms and conditions, and Policies. Collaborate with Tax and Treasury Business team, Procurement team and with external Service providers to resolve issues related to contracts/Sows/POs/Invoices. Adherence to Standard Processes and timelines (SLA) to support the Service Delivery. Ensure timely response to inquiries from the Tax and Treasury business team and other operational team members. Manage the right balance of communication with the business team members and management team (Emails, Calls, Meetings). Act on the Weekly Aging PR / Holds reports by coordinating with S2S team , Internal business team and suppliers to ensure timely solutions to Pending Purchase requests, Purchase orders, Invoices on Hold and contract and SOWs Proactively reach out to the reporting manager for any additional support to resolve key issues. Identify Process Improvement opportunities and being the change agent to bring in operations excellence. Conduct meetings with Key service providers and ensure a smooth operation of end-to-end Source to settle cycle with minimum escalations. Required Skills and Experience: Experience of 6 8 years in E2E Procurement function (PR/PO/Invoices) with relevant experience in the Contract review process. Knowledge of ERP Procurement and Payable(AP) process as a User is an essential pre-requisite. Demonstrate Excellent Customer Support skills. Demonstrate experience in MS Office (Word, PPT, Excel spreadsheet(able to do pivots, formulas)), ERP Procurement and web-based applications. Strong Verbal and Written Communication Skills. Good negotiation and collaboration skills to resolve inquiries and issues Location: Bangalore,Krishna Magnum Building, Survey No.165/3 and 165/4, Billekahalli Village, Begur Hobli Salary: INR 9,00,000 PA. 885804 Industry: IT-Software / Software Services Functional Area: Other Employment Type: Permanent Job, Full Time",

   "Job Description: Selling Partner Support-GERMAN Amazon.com strives to be Earth's most customer-centric company where people can find and discover virtually anything they want to buy online. By giving customers more of what they want - low prices, vast selection, and convenience - Amazon.com continues to grow and evolve as a world-class e-commerce platform. Amazon's evolution from Web site to e-commerce partner to development platform is driven by the spirit of innovation that is part of the company's DNA. The world's brightest technology minds come to Amazon.com to research and develop technology that improves the lives of shoppers and sellers around the world. The Selling Partner Support Associate acts as the primary interface between Amazon and our German business partners. The Selling Partner Support Associate will be responsible for providing timely and accurate operational support to German Merchants selling on the Amazon platform. The successful candidate has an immediate, distinct effect on the experience of customers of Amazon, making a strong record of customer focus a high standard for the role. A Seller Support Associate is expected to address chronic system issues, provide process improvements, develop internal documentation, and contribute to a team environment, all while adhering to service level agreements for phone and/or email cases. Basic Qualifications Completed Bachelors degree or higher Language: German (B2.2 certification or

above) Ability to work in shifts Experience within a customer service environment preferred. Desire to expand skills into new areas. Technical (Computers & Internet) savvy is required. Business acumen in areas of e-commerce and retail. Experience with e-commerce, as a consumer it is an essential requirement (payments, browsing, shipping, returns, etc) Committed seller advocate, drive process & tool improvements. Enthusiasm and strong self-motivation. Strong prioritization and time management skills, with a high degree of flexibility. Embrace constant change with flexibility and good grace. Demonstrate appropriate sense of urgency for contact response time in the face of variable workflow. Demonstrates effective communication, composure, and professional attitude Exemplary performance record, particularly with regard to quality & productivity Desired skill-sets include MS Office Application Excel and Internet Explorer / Mozilla Firefox Summary of Responsibilities Demonstrates effective, clear and professional written and oral communication. Provides prompt and efficient service to Amazon Sellers and Merchants including the appropriate escalation of Sellers issues. Builds Platform and business knowledge to better serve sellers Maintains a positive and professional demeanor always portraying the company in a positive light and effectively managing sensitive issues. Demonstrates excellent time-management skills and the ability to work independently knowledge while using departmental resources, policies and procedures. Contributes to a positive team environment and proactively aids team members with difficult contacts as needed. Maintains acceptable performance metrics such as quality, productivity, first contact resolution, and attendance. Actively seeks solutions through logical reasoning and data interpretation skills and identifies trends to appropriate channel including improvement suggestions. Liaise with other departments such as Customer Service, Merchant Investigations, or Payments teams as required to resolve Sellers issues and ques Salary: INR 5,00,000 - 7,00,000 PA. Industry: Other Functional Area: Other",

'Job Details : - ============== Job Role - Sales Executive No. of open position & Location -\xa0 Topsia - 2, Chinarpark/Rajarhat - 4 Salary - 8,500 (In hand) + PF + ESIC + Performance Incentive Work - Product Promotion and sales Contact - Saddam - 9051097786 Salary: INR 1,00,000 - 1,75,000 PA. Industry: Other Functional Area: Other',

'Job Opening For Data Scientist /AI Developer For Navi Mumbai Location',
'Job Opening For Senior Data Scientist With 5yrs To 12yrs of Experience',
'Job | Data Scientist',
'Job | Data Scientist | Machine Learning & Statistical Analysis',
'Journalist', 'Jr.Data Scientist', 'Junior Data Scientist',
'Junior Data Scientist - Deep & Machine Learning',
'Junior Data Scientist/ta', 'Junior/Primary/Assistant Teacher',
'Karvy Stock Broking Limited KARVY, is a premier integrated financial services provider, and ranked among the top five in the country in all its business segments, services over 16 million individual investors in various capacities, and provides investor services to over 300 corporates, comprising the who is who of Corporate India. KARVY covers the entire spectrum of financial services such as Stock broking, Depository Participants, Distribution of financial products - mutual funds, bonds, fixed deposit, equities, Insurance

Broking, Commodities Broking, Personal Finance Advisory Services, Merchant
Banking & Corporate Finance, placement of equity, IPOs, among others. Karvy
has a professional management team and ranks among the best in technology,
operations and research of various industrial segments',
        'Key Account Manager', 'Lab Assistant',
        'Lab Technician/Medical Technician/Lab Staff',
        'Landscape Architect',
        'Laurus Labs Ltd is a fast growing pharmaceutical company. About Company:
https://www.lauruslabs.com/',
        'Lead - Data Scientist', 'Lead / principal Data Scientist',
        'Lead AI/ ML Data Scientist - Social Networks - Work From Home',
        'Lead Data Scientist',
        'Lead Data Scientist - 8+ yrs, Bangalore Location',
        'Lead Data Scientist - BFSI',
        'Lead Data Scientist - Deep Learning/machine Learning',
        'Lead Data Scientist - Machine /deep Learning',
        'Lead Data Scientist - Machine Learning Models',
        'Lead Data Scientist - Machine Learning/ Algorithm',
        'Lead Data Scientist - Machine Learning/ Deep Learning',
        'Lead Data Scientist / Machine Learning Expert',
        'Lead Data Scientist and Cognitive Software Engineer',
        'Lead Data Scientist-Python and R', 'Lead Data Scientist/ML',
        'Leading LOGISTICS FIRM', 'Lecturer/Professor', 'Legal Manager',
        'Legal Officer', 'Librarian', 'Lobby/Duty Manager',
        'Logistics Executive', 'Logistics Manager',
        'Looking For Data Scientist in Hyderabad only PHD',
        'Looking for a Assistant Engineer Service for Flowserve Sanmar Limited
(Mechanical Seal Division)\xa0 to be based at Chennai JOB CONTENT To carry out
trouble shooting of seals/new installation/Spares business generation. KEY
RESPONSIBILITIES Installation of new seals Trouble shooting to seals Providing
technical support to customers by holding presentation for technicians/Engineers
Interacting with HO service and Engineering regarding seals problems/ failures/
trouble shooting Maintaining data as per ISO requirement for service complaints
& provide same to HO Preparing service reports and keeping branch sales/HO
service informed on site Problems Providing feed back on FSL seal performance
and competitors seal performance EXPERIENCE: Diploma Mechanical 4-8 Years of
experience in service/Maintenance function of Pump / Seal / Rotating Equipment
from a Centrifugal Pump Manufacturer Compressor Industry Technically Sound with
Good Product Knowledge Salary: Not Disclosed by Recruiter Industry: Industrial
Products / Heavy Machinery Functional Area: Other Employment Type: Full Time,
Permanent',
        'Machine Learning Engineer',
        'Machine Learning Engineer/data Scientist', 'Maintenance Engineer',
        'Management Information Systems(MIS)-Manager',
        'Manager - Data Scientist/python',
        'Manager - Market Research / Consumer Insights / Industry Analysis',
        'Manager -Data Scientist', 'Manager / Sr Manager - Administration',

'Manager / Sr Manager - Facility Management',
        'Manager Data Scientist',
        'Manager Marketing - Internal / External Communication',
        'Manager, Data Scientist || Fiserv || Chennai Location',
        'Managing Editor',
        'Manufacturers and exporters of Micro Nutrients, Organic Manure, Bio-
Fertilizers, Bio-Activators, Bio-Pesticides & Pesticides, Multiplex is the
leading household brand name for farmers across pan India. With over 40 years of
experience in the field of agronomics, we are the pioneers of green farming and
providing complete solutions for agriculture and horticulture to increase yield
by quantity & quality.',
        'Marketing Manager', 'Marketing Research Executive/Manager',
        'Marketing Research Field Supervisor', 'Masseur',
        'Material Management Executive/Manager', 'Mathematics Teacher',
        'Mechanical Engineer-HVAC',
        'Mechanical Engineer-Plumbing/Fire Protection',
        'Mechanical Engineer-Telecom', 'Media Buying Executive/Manager',
        'Media Planning Executive/Manager', 'Medical Officer',
        'Medical Representative', 'Medical Superintendent/Director',
        'Medical Transcriptionist', 'Merchandiser',
        'Mergers & Acquisitions Manager',
        'Mgr - Data Scientist (Immediate Joinees ONLY _ 15 days)',
        'Microbiologist', 'Music Teacher',
        'Must have hands on experience in making various kinds of coffee
Experience with Coffee Day, Starbucks, and other prominent Caf Preferred.
Experience 6 months and above. Salary: INR 1,50,000 - 2,00,000 PA. Industry:
Media / Entertainment / Internet Functional Area: Other Employment Type:
Permanent Job, Full Time',
        'National Head', 'Nephrologist', 'Network Administrator',
        'Network Planning Engineer', 'Network Planning Manager',
        'Neurologist',
        'New Model STRCS & Launching Plan as per sales Dept. 3d Design
Professional (Uni-garphics & Solid works) New Model BOM Validation PL Sheet
Preparation and Validation New Model CKD Ordering Confirmation GP Ratio Control
through RCI Activities Cost Buster Project Lead New Mold History & Tech. Data
New Mold Drawing Management Local Parts & CKD Parts Management Local Mold &
Tools New Development Plan New Model Launching as per Schedule & Quality Issues
Solving Plan Drawing Management Salary: Not Disclosed by Recruiter Industry:
Consumer Electronics / Appliances / Durables Functional Area: Other Employment
Type: Permanent Job, Full Time',
        'Nurse', 'Nursery Teacher', 'Nutritionist',
        'OPD Management and Consultants Coordination. Registration and billing
Telephone operations. Appointment and Scheduling. Cancelling / rescheduling
appointment whenever necessary by calling and informing the concerned patients
Information delivery Supervising the Reception- by handling queries, enquiries
and lab reports Update of Contact details of consultants/ star dials and
extension numbers Preparing Indent of Consultant Chambers. Compiling FOS data

and sending it to the concerned OPD executive who is in charge of consolidating data Issuing Keys & Lockers of the drawers. Supervising and checking of daily MIS before sending it. Service recovery in that Area. Training of the HIS modules in front office with the power users. Maintaining attendance, leave & delays in absenteeism of the Consultants. Giving on-the-job training. Room Readiness. Inventory of the stationery. Inter departmental co-ordination (Wards, H/K, Maintenance, Stores, Admin, IT) Handles patient grievances (regarding waiting period for the Drs and non availability of appointments) Salary: INR 90,000 - 2,25,000 PA. Industry: Medical / Healthcare / Hospitals Functional Area: Other Employment Type: Permanent Job, Full Time',

'On Contract Basics cataloging at various portals Product Knowledge of Apparels Listing of new products on all major marketplaces Essential competencies -High Proficiency level of Excel -Customer Oriented Salary: INR 1,75,000 - 2,75,000 PA. Industry: Internet / Ecommerce Functional Area: Other Employment Type: Permanent Job, Full Time',

'Oncologist',

'One of the most comprehensive portfolios of offerings on the market Sopra Steria, a European leader in digital transformation, provides one of the most comprehensive portfolios of offerings on the market, spanning consulting, systems integration, industry-specific solutions, infrastructure management and business process services. It provides end-to-end solutions to address the core business needs of large companies and organisations, helping them remain competitive and grow. Combining added value with innovative high-performance services, Sopra Steria excels in guiding its clients through their transformation projects to help them make the most of digital technology. With more than 44,000 employees in more than 20 countries, Sopra Steria generated revenue of 4.1billion in 2018.',

'Opening For Data Scientist - Birlasoft - Pune',

'Operations Executive', 'Operations Manager', 'Operations Officer',

'Opportunity For Data Scientist',

'Opportunity For Data Scientist For Global Investment firm',

'Opportunity For Data Scientist Internship - Bengaluru',

'Opthamologist', 'Orthopaedist', 'Other', 'Outside Consultant',

'Outside Technical Consultant', 'PPC /Pay Per Click Lead',

'PPC /Pay Per Click Specialist',

'PTC Inc. is a computer software and services company founded in 1985 and headquartered in Boston, Massachusetts. The global technology company has over 6,000 employees in 30 countries, 1,150 technology partners and over $1bn in revenue.[citation needed] The company began initially developing parametric, associative feature-based, solid computer-aided design (CAD) modeling software in 1988, including an Internet-based product for product lifecycle management (PLM) in 1998. PTC products and services now include Internet of things (IoT) and augmented reality (AR) among others.',

'Pastry Chef', 'Pathologist', 'Pay Roll/Compensation Manager',

'Payroll Executive', 'Pediatrician',

'People are at the heart of every successful business initiative. At TEKsystems, a leading provider of IT staffing and IT services, we understand

people. Every year we deploy over 80,000 IT professionals at 6,000 client sites across North America, Europe and Asia. Our deep insights into the IT labor market enable us to help clients achieve their business goals-while optimizing their IT workforce strategies.',
        'Performance Management Manager', 'Pharmacist/Chemist/Bio Chemist',
        'Photographer', 'Physics Teacher', 'Physiotherapist',
        'Position Data Scientist', 'Position Senior Data Scientist',
        'Post Sales Consultant', 'Practical Training/Internship',
        'Practice Head / Practice Manager', 'Pre Sales Consultant',
        'Principal', 'Principal – Data Scientist',
        'Principal Data Scientist',
        'Principal Data Scientist – Big Data/ Machine Learning',
        'Principal Data Scientist – IIT/ NIT / BITS',
        'Principal Data Scientist – Machine/Deep Learning – NLP/Tensorflow',
        'Principal Data Scientist – NLP/Voice AI',
        'Principal Data Scientist – Recommender system',
        'Principal Data Scientist-Digital (OOG)',
        'Principal Software Engineer -data Scientist-from Pedigree Only',
        'Process Engineer-Plant Design', 'Process Flow Analyst',
        'Product Designer', 'Product Development Executive',
        'Product Development Manager', 'Product Executive',
        'Product Manager', 'Product Manager-Auto/Home Loans',
        'Product development Data Scientist ML', 'Product/Brand Manager',
        'Production Executive', 'Production Manager', 'Program Manager',
        'Project Architect', 'Project Finance Manager', 'Project Lead',
        'Project Manager-IT/Software',
        'Project Manager-Production/Manufacturing/Maintenance',
        'Project Manager-Telecom', 'Proof Reader',
        'Proposal Response Manager',
        'Providing data analysis and reports on performance of apparel brands and units monthly MIS docket for the top management and Corporate Office. Coordinating the P & B process for T & A quarterly deck for T & A business along with providing other adhoc analysis & reports as required. Financial Reporting-Financial Planning Retail Expansion and Operational Review- Sales Marketing and Sellex Analysis Pricing and Inventory & Others Required Candidate profile Master Degree Salary: Not Disclosed by Recruiter Industry: Retail / Wholesale Functional Area: Other Employment Type: Full Time, Permanent',
        'Psychiatrist', 'Public Relations & Media Relations Manager',
        'Public Relations Executive', 'Purchase Executive',
        'Purchase Officer', 'Purchase/Vendor Development Manager',
        'Python Data Scientist – Banking/retail Domain',
        'Quality Assurance & Quality Control-Executive',
        'Quality Assurance & Quality Control-Manager',
        'Quality Assurance/Quality Control Executive',
        'Quality Assurance/Quality Control Manager', 'Quality Coach',
        'R&D Executive', 'RF Engineer', 'RF System Designer',
        'RFI / RFP Manager', 'Radiologic technologists', 'Radiologist',

'Recruitment Executive', 'Recruitment Manager', 'Regional Manager',
'Regional Marketing Manager', 'Regional Sales Manager',
'Regulatory Affairs Manager', 'Relationship Executive',
'Release Manager',
"Requirement Qualifications: Candidate must possess at least a
Bachelor's/College Degree in any field. Preferably with Science, technology or
computer application background At least 4 to 8 years of working experience with
IT / Security is required for this position Should be knowledgeable in
Information technology / IT security concepts / Information security concepts A
good understanding of various information system technologies including: Active
directory, Networking, LAN / WAN, firewalls and enterprise security solutions
Job Summary: Carry out all information security risk assessment Carry out
Privacy risk and impact assessment for client operations and technology
infrastructure Conducting operations audit based on Information security and
privacy principle Conducting review of contractual contracts, privacy contracts
/ exhibits / privacy agreements Supporting compliance certification (ISO, PCI
DSS) and client audits Handling information security incidents, data breaches
investigations Assist Risk management functional leaders in overseeing
compliance activities relating to information security Driving information
security training and awareness to ensure employees are aware of their
responsibilities Experience with network security Scanners, and other
vulnerability analysis tools such as Nessus, Qualys. Experience in generating
system assessment reports Ability to implement the policies and procedures laid
down by the IT and Infosec. Salary: Not Disclosed by Recruiter Industry: BPO /
Call Centre / ITES Functional Area: Other Employment Type: Full Time,
Permanent",
'Research Associate', 'Research Scientist',
'Reservations Executive', 'Restaurant Manager',
'Retail Marketing Manager', 'Retail Store Manager',
'Roles and responsibilities\xa0 Assess students needs for training Align
training with the organizations strategic goals Develop training programs that
make the best use of available resources Oversee the creation of online learning
modules and other educational materials for students Teach training methods and
skills to students Evaluate the effectiveness of training programs and students
Walk in Details: No.6-3-636, Perika Bhavan Circle, Raj Bhavan road, Khairatabad,
Hyderabad 500004. Interview Date & Time. 01-07-2019 to 03-07-2019. Time: 9am to
4pm Interested Candidates share your resumes to hr2@chennaisamirta.com Salary:
Not Disclosed by Recruiter Industry: Education / Teaching / Training Functional
Area: Teaching , Education , Training , Counselling',
'Roles and responsibilities\xa0 Effectively handling processes and
compliance of the customer service department. Identifying areas of the possible
discrepancies in the claims using intimation data. Close co-ordination with the
surveyor to convey the discrepancies. Specification of loss prevention
recommendations Active support of internal and external training and knowledge
management initiatives Developing and implementing claims technical policies and
procedures such as quality audit, cost minimization techniques. Working
collaboratively with other business units to achieve division and business unit

goals Salary: INR 3,00,000 - 4,75,000 PA. Industry: Insurance Functional Area: Other',

        'Roles and responsibilities\xa0 Functional Responsibilities He / She will be a key member of the Media Center of Excellence (MCoE) team, responsible for carrying out development activities, executing analysis & supporting various MCoE projects. Work on POCs (Proof of Concept), ad-hoc delivery, crack codes for data tables, schemas, and structures in panel data warehouse. Role involves working under dynamic, challenging conditions demanding multi-tasking. Also involves working with multiple points of contact and stakeholders, other analysts on the team and guiding them with the usage of right kind of technique/tool/process, as required. Manage day-to-day delivery independently and in collaboration with clients on a variety of projects by obtaining project specifications, required clarifications, and eventually presenting results/findings to the clients. Role requires proficiency in Big data handling tools such as Hadoop/Hive, R programming knowledge, Julia Role demands proficiency in Microsoft Excel and PowerPoint to report findings and actionable insights obtained through studies. Ability to think critically to address and solve clients business questions. Being creative in identifying new techniques and processes to streamline and increase efficiency and effectiveness of current work-streams is a plus. Strong project management skills and high levels of attention to detail. Organizational Information Security Responsibilities Follow the organizations security policy and procedures, Maintain the clear desk and clear screen policy and other physical security procedures, Follow the password, access control procedures, back up PC data Report security incidents. Professional Experience Experience in development, experience in developing statistical methodologies. Programming languages: advanced to expert proficiency in Hadoop/Hive, R, Julia, Hive Advanced proficiency in statistical methodologies and ability to independently develop statistical methods to isolate impact due to stimulus (such as advertising impact on purchase behavior) in experimental designs. Proficiency with Generalized Linear Models, Bayesian algorithms, and isolating impacts due to covariates Computing variances on samples and developing methodologies to compute goodness of fit for GLM models Familiarity with longitudinal and panel data analysis and its application in marketing; nice to have exposure to/some familiarity with time series analysis, design of experiments, sampling theory Demonstrates strong interpersonal, communication and presentation skills; Trusted; Educates on analytic methods, shapes thinking and influences the decisions Should have medium to high proficiency in MS-Office, specifically Excel and PowerPoint Should have basic knowledge of market research & any specific knowledge on retail and FMCG/CPG industry will be an added advantage. Client Management and Value - Effectively manages client projects; builds and maintains support and trust; acts as a trusted advisor and delivery partner Behavioral & Attitudinal Skills Client Management - Client Focus Communication Skills - Effective Written and Verbal Communication Thinking Skills - Analytical Thinking - Critical thinking Drive for results/Managing self and team - Decision making - Planning & organizing - Problem sensitivity Innovation and Continuous Improvement - Active learning - Fluency of ideas Collaboration and Teamwork - Interpersonal Relationship & Networking - Team

playing Change Leadership - Change Driver Ownership - Responsibility &
Initiative - Negotiation skills Salary: Not Disclosed by Recruiter Industry: IT-
Software / Software Services Functional Area: Other',

 'Roles and responsibilities\xa0 Global Quote to Order Operations - part
of the Global Finance Operations team, processing Migration Requests, validating
documents, Products Mapping and calculation on support and license values as per
procedures and guidelines set up for the process. Interact with Internal
customers from different LOBs to process orders. Liaison with Sales, Contracts
and VAD/Partners to ensure that all information is available to ensure accurate
booking of orders and revenue in accordance with established procedures and
guidelines. Provides administrative support for the accounting function
including the areas of general ledger, accounts payable, accounts receivable,
fixed assets, and inter-company transactions. Interact with other LOBs and
Business functions as relevant on the process. Job Role & Career Level Senior
Analyst, Job Description: Primary Skills: Transaction Handling: Should be able
to process transactions as per defined standard operating procedures Should be
able to carry out necessary research in Oracle systems like customer standards,
installed base, quoting application, service contracts, etc. Should be able to
work with stake holders and peer group on various process related questions /
issues Should have the ability to serve as a primary point of contact for
process related questions / escalations / issues Should be able to contribute to
other activities like UAT, Transaction Audits, Reporting & Analysis,
Documentation and Process Training Communication: Should be able to articulate
clear and concise messages Should be able to demonstrate understanding of
internal and/or external customer needs and how to meet them Should be able to
effectively communicate with various stakeholders like Sales Teams, Development
teams, Senior Management, etc. across geographies Adapting to Change: Shows
willingness to adjust to changing work environments Should be flexible to work
in any shift to meet global business requirements Should have the ability to
multi-task in a fast paced environment in meeting timelines despite changing
needs Problem Solving & Analytical Ability: Should be able to recognize
problems, gather appropriate data, diagnose root cause of issues and provide
effective workarounds, as required Should be able to analyze the data and draw
inferences from both qualitative and quantitative data Should be able to bring
forward process improvement ideas Result Orientation: Should persevere to
deliver against objectives and take personal accountability for own performance
Should demonstrate attention to detail in all aspects of work Should act with a
sense of urgency and confidence to deliver quality work in a timely manner Other
Skills: Should have the ability to learn the nuances of business & processes in
a short period of time Should be a team player with good interpersonal skills
Preferred Qualification/Skills Graduation in Science or Commerce 3-5 years of
experience in KPO/BTO environment Should have good skills in MS Office
Applications like Excel, Word and Power Point Hands on experience in Fusion
application will be an added advantage Salary: Not Disclosed by Recruiter
Industry: Other Functional Area: Other',

 'Roles and responsibilities\xa0 New Business Development Achieving the
sales target / KPIs of the organization DSO Controlling Responsible for

Collection and Receivables Inventory Control RFQ, Quotation, Negotiation in coordination with the KAM team Responsible to get the price increases from the customers Responsible to achieve the desired gross margins New product introduction Eliminating loss making product through VAVE ideas/ bench marking with open market products Technical interface to Project management and Technical Planning to get the optimized designs and costs in line with the market expectations Experience in handling Japanese customers TOYOTA, HONDA, SUZUKI Candidate will be joining in Hosur for 3 months of Training Purpose & Product Knowledge, then will be transferred to Pune. Salary: Not Disclosed by Recruiter Industry: Automobile / Auto Anciliary / Auto Components Functional Area: Other',

'Roles and responsibilities\xa0 Position: Senior Research Analyst Job location: Bangalore Key Objectives Developing solid understanding of businesses being assessed in discussion with promoters and management Analysing historical business and financial performance Understanding business and financial risk Preparing financial projections for corporates Understanding and preparing detailed notes Presenting a case to a rating committee Liaison with external agencies including issuers and investors Technical Skills & Experience Minimum three years experience of working on mid-sized corporatecredit analysis as the lead analyst Smart communication and presentation skills Knowledge and Expertise : Knowledge of credit rating process and report writing. Management: Ensure full compliance with laid down rules, processes and procedures at all times. Consistently demonstrates cost conscious behaviour. Communication: Displays strong communication and interpersonal skills. Quality Service: Optimal utilisation of time. Leadership and Initiative: Ensure full compliance with laid down rules, processes and procedures at all times. Proactively identifies and escalates situations wherein issuer needs to be managed to elicit full cooperation. Salary: Not Disclosed by Recruiter Industry: KPO / Research / Analytics Functional Area: Other',

'Roles and responsibilities\xa0 Role : Online Brand Store (eCommerce) Location : Greater Noida Industry : Consumer Durable Responsibilities : Incumbent will be responsible for deployment of global online stores Will be responsible for GTM for online store, their execution, handling digital marketing initative, increasing the online brand awareness Will be responsible for planning and achieving sales target and doing robust marketing for building the online store presence in digital space. Managing site performance, demand generation, channel health and managing overall marketing efficiency. Will be collaborating with cross functional teams for to manage all aspects of eCommerce business including online marketing, website design, web analytics, content strategy, promotional campaigns etc. Mandatory : Experience: 7-13 years of experience in managing online and eCommerce business in Consumer durable industry. Education: Any Graduate with good communication skills. Salary: INR 20,00,000 - 30,00,000 PA. Industry: Consumer Electronics / Appliances / Durables Functional Area: Other',

'Roles and responsibilities\xa0 Selenium Automation Resources.6.Selenium with Strong Java.Good Communication Skills with Good Attitude and Aptitude.1.Very good understanding and hands on automation experience. Must

design and implement robust scalable and high quality test automation suites2.Write execute and debug automated test cases troubleshoot and debug complex systems. Must have excellent problem solving skills.3.Experience in communicating with business teams other development teams and management to collect requirements describe software product features and technical designs Salary: Not Disclosed by Recruiter Industry: Internet / Ecommerce Functional Area: Other',

        'Roles and responsibilities\xa0 Walk In interview at Fortis Hospital Mulund, Mumbai for Patient Care Services department in Front desk/ OPD Billing. CRITERIA: Qualification is must. English speaking is must. INTERVIEW DETAILS: NO INTERVIEWS ON 1st May 2019 DATE : 30-Apr-2019, 2nd May 2019 - 04th May 2019 TIME\xa0 :\xa0 10AM - 04 PM VENUE\xa0 : Fortis Hospital Mulund, Mumbai CONTACT PERSON : DISHA JAIN Interested candidates are requested to carry following documents: 2 hard copies of resumes. AADHAR Card Last 3 months salary slips Original graduation degree certificate Interested candidates can directly walk in call us on 09987011279 Salary: Not Disclosed by Recruiter Industry: Medical / Healthcare / Hospitals Functional Area: Other',

        'SAP GRC Access Control: At least 1 end to end implementation of GRC AC 10.0/10.1/12.0 or 3-4 years of support experience Proficient in ECC/S4HANA Role management and user administration Good understanding of SAP Security Complete understanding of SPRO Configurations for AC Proficient in Risk Analysis and Remediation. In depth understanding of SoD and the Ruleset generation and maintenance along with mitigation control Good command on MSMP Configuration, HR Triggers In-depth understanding of Emergency Access management and Business Role Management Working knowledge of Fiori/ HANA Studio is desirable. SAP GRC Process Control: At least 1 end to end implementation of GRC PC 10.0/10.1/12.0 or 3-4 years of support experience Proficient in Continuous Control monitoring along with good command on various Business rule sub scenarios and BRF+ Experience in HANA based CCM Complete understanding of SPRO Configurations for PC Good understanding of Risk and Controls in SAP ECC/S4HANA Proficient in various control assessments and workflow configurations In-depth understanding of Process Control roles and responsibilities. Salary: Not Disclosed by Recruiter Industry: Accounting / Finance Functional Area: Other',

        'SENIOR DATA SCIENTIST',
        'SENIOR DATA SCIENTIST AND MACHINE LEARNING ENGINEER',
        'Safety Officer/Manager',
        'Saisun Outsourcing Pvt Ltd, Recruitment | Contract Manpower | Payroll Outsourcing | Campus Hiring | Facility Management Services | Statuary Compliance',
        'Sales / BD Manager', 'Sales Coordinator',
        'Sales Executive / Officer', 'Sales Executive/Investment Advisor',
        'Sales Executive/Officer', 'Sales Head', 'Sales Officer',
        'Sales Promotion Manager', 'Sales Trainer',
        'Sales/Business Development Manager',
        'Sales/Business Development Manager-Broking',
        'Sales/Business Development Manager-Derivatives',
        'Sales/Business Development Manager-Forex',

'Sales/Business Development-Manager', 'School Teacher',
'Science Teacher', 'Seaman',
'Search Engine Marketing/SEM Specialist',
'Search Engine Optimisation /SEO Analyst',
'Search Engine Optimisation /SEO Lead',
'Search Engine Optimisation /SEO Specialist', 'Secretary/PA',
'Security Engineer', 'Security Manager', 'Security Supervisor',
'Senior Data Scientist',
'Senior Data Scientist (AVP) - Leading Finance Company - Bangalore',
'Senior Data Scientist (NLP)',
'Senior Data Scientist - Ai/ml, SVM',
'Senior Data Scientist - Artificial Intelligence - Online/ Ecommerce',
'Senior Data Scientist - BFSI',
'Senior Data Scientist - Banking & Financial Services',
'Senior Data Scientist - IIT/NIT/BITS',
'Senior Data Scientist - Machine Learning & Regression Algorithms',
'Senior Data Scientist - Marketing Analytics',
'Senior Data Scientist - Mathematical Finance',
'Senior Data Scientist - Predictive Modeling/ Machine Learning',
'Senior Data Scientist - Product Development Firm',
'Senior Data Scientist - Product Development Firm - IIT/ NIT/ BITS',
'Senior Data Scientist / Algorithms Specialist',
'Senior Data Scientist / Data Scientist - KPO',
'Senior Data Scientist / Machine Learning / AI Engineer',
'Senior Data Scientist / Machine Learning Engineer',
'Senior Data Scientist [ML Model,azure ML Pipeline,python,r]',
'Senior Data Scientist in Manhattan Associates (r&d), Bengaluru',
'Senior Data Scientist(Build Data Models/Solutions) -Bangalore/Chennai',
'Senior Data Scientist, Machine Learning',
'Senior Data Scientist/ Data Scientist - KPO',
'Senior Data Scientist/CTO', 'Senior Deep Learning Data Scientist',
'Senior Design Engineer',
'Senior Manager - Data Scientist - Banking Domain - Iit/nit/bits',
'Senior Manager - Data Scientist - Iit/nit/bits',
'Senior Manager I - Data Scientist', 'Senior Outside Consultant',
'Senior Service Data Scientist',
'Senior Sub Editor/Senior Reporter', 'Service Delivery Leader',
'Service Engineer', 'Service Manager',
'Service/Maintenance Engineer', 'Service/Maintenance Supervisor',
'SnapSeaarch (formerly known as Pharmahood Consultants) operates as an
extended HR arm for its clients, providing Recruitment services to MNCs and
Business Conglomerates across India. The organization was founded in 2003 for
serving mainly the Healthcare sector and has since grown the company in this
decade\'s time to serve 17 different industry verticals today. Today SnapSeaarch
is amongst the "Top 3 Preferred Recruitment Services Partner" for its long-
standing clients. SnapSeaarch has been known in the executive search names
through its Process, People and Passion to mark a difference in each and every

assignment takes up. All 3 Ps at SnapSeaarch marks difference with their quality uncompromised for the entire process. SnapSeaarch is in the midst of another record setting year to get covered in the Consultants Review Magazine as the pioneers in the Recruitment industry. We have been recognized as "India\'s 10 Most Promising Recruitment Consultants-2018" in the Consultant Review Magazine March 2018 edition.',

'Social Media Marketing Manager', 'Social Studies Teacher',
'Soft Skill Trainer', 'Soft Skills Trainer', 'Software Developer',
'Software Engineer',
"Solugenix is an information technology services firm that has a rich history of providing comprehensive technology services and solutions for more than four decades. As a pioneer in IT services, we've partnered with some of the biggest global corporations across many industries. Our history was built on a foundation of partnerships with global brands like McDonald's, Microsoft, CIT Group, Johnson & Johnson, Herbalife, Sony Pictures Entertainment, and many others. Whether it's providing dedicated support centres, staffing quality teams, or delivering business service solutions, clients can always count on Solugenix.",

'Solution Architect / Enterprise Architect', 'Sourcing Manager',
'Sous Chef', 'Spanish Teacher', 'Special Education Teacher',
'Special Effects Technician',
'Sports / Physical Education Teacher', 'Sr . Data Scientist',
'Sr Data Scientist',
'Sr Data Scientist - Computer Vision, Deep Learning',
'Sr Data Scientist - TOP US MNC - Bangalore',
'Sr NLP & Text Mining Data Scientist', 'Sr Visualiser',
'Sr. Data Scientist', 'Sr. Data Scientist / Analyst',
'Sr. Data Scientist / Machine learning Expert',
'Sr. Data Scientist / Team Manager',
'Sr. Data Scientist- Python and R , Matlab', 'Staff Function',
'Staff Nurse', 'Staffing Specialist/ Manpower Planning',
'Stenographer/Data Entry Operator', 'Steward',
'Store Keeper/Warehouse Assistant', 'Structural Engineer-Building',
'Sub Editor/Reporter', 'Subject Matter Expert',
'Suguna Group was founded in the year 1984 with the inception of Suguna Foods in poultry sector by first generation entrepreneurs. Suguna is a USD 1.3 billion (INR 9,000 cr) group and leader in Indian protein food/animal farming industry. With an employee footprint of more than 8500, the group is in to poultry, dairy, processed protein food, animal nutrition, healthcare & biologicals. Group companies are Suguna Foods, Suguna Dairy, Globion, Aminovit Srilanka, Suguna Bangladesh and Kenya. Suguna Foods is the largest poultry enterprise in India and it ranks among the top 10 worldwide. The fully integrated operations cover broiler and layer farming, hatcheries, feed mills, processing plants, vaccines and exports. Suguna markets live broiler chicken, value added eggs, ready-to-eat and ready-to-cook chicken products. With the intent to provide consumers with fresh, clean and hygienic packed chicken, Suguna has set up a chain of modern retail outlets in the name of Ã¢â‚¬ËœDaily

FresshÃ¢â¬â¢. Suguna Foods pioneered contract farming in poultry industry, and now has presence in 21 states in India. Suguna as a brand is known for its quality products which has been well accepted by the consumers. Suguna Group always believes in energising rural India and providing nutritional security to India and is proud to associate with the mission of improving livelihood of 38,000 farmers',

'Summary: We are looking for a seasoned business / product professional with core expertise in strategic thinking, planning and executing disruptive initiatives at a large scale. The person will be responsible for leading the seller portal end to end. The role involves working closely in cross functional set up including the clients, business and operations teams to plan and execute the product roadmap to drive exceptional growth in core KPIs. Responsibilities: Build and evangelize short-term and long-term product vision in close collaboration with the product engineering, business and operations teams. Drive innovation in the product and build efficiencies in the development process with an end objective of improving the customer delight thereby leading to better adoption and retention. Build customer insights through primary / secondary research and data analytics. Work closely with product marketing teams to drive the product agenda amongst the clients and the business teams. Keep a track on the competition landscape and new trends in product / technology for continuous product / business improvement. Manage the product lifecycle from concept to phasing out of the product(s) across the entire portfolio including UI/UX, Engineering, QA, product communication etc. Inspire, motivate, develop and lead a team of technology and product management professionals to build and deliver world-class products that make a difference for our customers and foster the ecosystem of good. Skills and Expertise: Mandatory 8+ years managing product development teams. Experience working closely with internal and external stakeholders. Strong analytical skills working with data to make product decisions. Demonstrated history of continuous learning and ability to stay current with technology and product trends. Experience working in Agile or SCRUM process. Exceptional ability to negotiate and influence with cross functional peers / seniors. A healthy mix of quantitative aptitude and qualitative perspective in decision making. Knowledge of all the relevant product / process management and analytical tools e.g. JIRA, Google Analytics etc. Desired Experience in managing product development team for a large-scale internet business. Experience in incubating technology-based products/services Education: B.Tech / M.Tech from Tier 1 college MBA from Tier 1 college Span: Seller Platform Perks and Benefits\xa0 Best in the Industry Salary: Not Disclosed by Recruiter Industry: Internet / Ecommerce Functional Area: Other',

'Surgeon', 'Switching/Router Engineer', 'System Administrator',

'System Analyst', 'System Integration Technician',

'System Security',

"TEKsystems - an Allegis Group company, is the world's leading Technology Staffing & services Organization. We service over 4000 clients globally, of which 91% are Fortune 100, 82% are Fortune 500 companies. At the moment, I am working towards SAP C4C consultant position for one of our clients - A global leader in manufacturing engineered products for Defence, Aero-Space, Atuomobile,

Automotives, Power Transmission etc., based in Bangalore.",
        'TEKsystems Global Services (TGS) is the Software services division of
TEKsystems. TEKsystems is a $4.3 billion organization with over 150 offices
across the globe. TGS accounts for $600 Million and has about 5000 full time
employees across the globe of which 1200 are in India. TGS operates through
multiple solution centers across locations like US (Dallas, Redmond,
Bloomington, Baltimore, Maryland), Europe (Amsterdam, London), Canada, Manila
and India (Bangalore and Hyderabad). We are an ISO 27001 certified
Organization',
        'TV Producer', 'Taxation(Direct) Manager',
        'Taxation(Indirect) Manager', 'Teacher/ Private Tutor',
        'Team Lead/Technical Lead', 'Team Leader -(NonTechnical)',
        'Team Leader -(Technical)',
        'Team Leader-Quality Assurance/Quality Control',
        'Tech Lead Data Scientist - Dl/ml - Hyderabad',
        'Technical / Process Trainer', 'Technical Architect',
        'Technical Documentor', 'Technical Lead -Hardware Design',
        'Technical Lead/Project Lead', 'Technical Support Engineer',
        'Technical Support Manager', 'Technical Writer',
        'Technical/Process Trainer', 'Technology Manager',
        'Telecalling/Telemarketing Executive',
        'Telesales/Telemarketing Executive/Officer', 'Testing Engineer',
        'Textile Designer', 'The Glove',
        'To prepare daily sales MIS To prepare referrals MIS To maintain all
sorts of data requirement of the team and ensuring reporting of the same on a
timely basis Adhoc requirements of the unit for data if any. Job Location :
Vashi, Navi Mumbai Thanks & Regards, Team- HR Salary: INR 3,00,000 - 3,50,000
PA. Industry: Medical / Healthcare / Hospitals Functional Area: Other Employment
Type: Full Time, Permanent',
        'Tomtom is Hiring For Senior Data Scientist',
        'Tour Management Manager/Senior Manager', 'Tour Mngmt Executive',
        'Trade Finance Operations Manager', 'Trainee', 'Trainee Cadet',
        'Trainee-freshers-machine Learning-ai-data Scientist', 'Trainees',
        'Trainer', 'Trainer/Faculty', 'Training Manager',
        'Transitions/Migrations Manager', 'Translator',
        'Transport Executive', 'Transport/Distribution Manager',
        'Travel Agent', 'Travel Desk - Coordinator', 'Treasury Manager',
        'Treasury Operations Manager', 'Underwriter',
        'Unisys is a worldwide information technology company. We provide a
portfolio of IT services, software, and technology that solves critical problems
for clients. We specialize in helping clients secure their operations, increase
the efficiency and utilization of their data centers, enhance support to their
end users and constituents, and modernize their enterprise applications. To
provide these services and solutions, we bring together offerings and
capabilities in outsourcing services, systems integration and consulting
services, infrastructure services, maintenance services, and high-end server
technology. Unisys India was established in 2004 in Bangalore. We have

strengthened tremendously in terms of headcount and infrastructure, as well as capabilities to become an integral part of the Unisys global delivery organization. Today, we have three state-of-the-art facilities – two in Bangalore and one in Hyderabad. At Unisys India you will see a representation from most functions of Unisys. Be it product development for Systems & Technology, application design and migration for Global Industries, service desk / enterprise computing / ITIL processes / field operations back office for GOIS or extensions of various Unisys corporate functions. We are here today because of our relentless efforts towards timely, quality and cost efficient deliveries, all meant to drive a high level of customer satisfaction at a compelling cost. A unique blend of mature processes, high focus on tools and, above all a team of highly talented and motivated employees play a critical role in making this possible. We are poised to play an increasingly important role in Unisys journey towards predictable and profitable growth. You could be a part of this change. Imagine It. Done. For more information, visit http://www.unisys.com',
        'Unit Manager', 'User Experience Designer', 'VP/Principal/Partner',
        'Visiting Faculty / Guest Faculty', 'Visualiser',
        'Voice & Accent Trainer', 'Waiter / Waitress / Sommelier',
        'Walk-in Drive For Data Scientist - March 19', 'Warehouse Manager',
        'We are hiring For Senior Data Scientist Role - Mumbai',
        'We have an excellent opportunity for .Net developers with CIBER Work Location: Cibersites India Pvt Ltd, 6th Floor, BWTC, Mahadevpura, Bangalore. Landmark: Next to EMC, same campus. Contact Person: Amrita Location: Bangalore Experience Level: 4 -6 years Job type: Permanent Note: Should be comfortable to work in Ciber. Looking only for Immediate to 15 days joiners only. Must be comfortable for F2F interview. Mandatory skill:\xa0 ASP.NET with MVC framework. C#, ASP.NET, MVC 4 or 5, SQL Server 2008/ 2012, Entity Framework. Job Description: Must have Practical experience in C#, ASP.NET, MVC 4 or 5, SQL Server 2008/ 2012, Entity Framework, .Net Framework, AJAX, Java Script, HTML5, XML, XSLT, SSRS, SSIS, SSAS Must to have Comprehensive knowledge of Software Development Life Cycle (SDLC), Requirements Analysis, Object Oriented Programming (OOP), Information Systems and software design and patterns Must have Ability to multi-task and stay organized in a dynamic work environment. Problem solving skills to assess design alternatives and perform tradeoffs to determine designs or functionality that best meet customer needs. Nice to Have Nice to have Knowledge of parallel processing, distributed and grid computing, Service-Oriented Architectures (SOA) and Web Services Applications integrations and messages control between systems Graphics skills and website designing using Photoshop, Bootstrap, Flash animations, 3D design, etc. Mobile Applications development on IOS, Android, or Xamarin. Please share the details to aanandita@ciber.com with your updated resume . Full Name- Total exp.- Rel. exp.- Notice Period- CTC- ECTC- Reason for Job change- Current Location- Salary: Not Disclosed by Recruiter Industry: IT-Software / Software Services Functional Area: Other Employment Type: Permanent Job, Full Time',
        'We have an urgent opening for Financial Counselor / Estimates: Service Line Brief Role & Responsibility: Taking effort to convert potential OPD Patient to IPD. Preparing accurate estimations regarding surgeries and other procedures

and explaining them to the patients. Co-coordinating with Doctors and Patient. Patient counseling regarding billing, Top Up deposits, TPA activities. Educate patient about payment options & financial Assistance. Maintaining Data for financial Reporting. Co-ordination with Consultants, Nursing staff and Allied services for various patient services. Accurately performs registration process for new and existing customer. Ensure accurate information is given to the patient and relatives and satisfy their Queries. Preparing & Counseling Estimate for Surgical patients. Co-ordinate with billing team for completing daily discharges in the desired TAT. Solving queries and issues of patient in any services. Updating Audit Report. Reporting and escalating issues and daily updates occurring to Manager. Re-counseling. Follow-up with patients. Implementation and Promotion of new packages. NABH training Ensuring proper implementation of rules by staff. Training to the new employees. Perks and Benefits\xa0 Open / Bet in Industry Salary: Not Disclosed by Recruiter Industry: Medical / Healthcare / Hospitals Functional Area: Other',

        'Wealth Manager', 'Web Designer', 'Webmaster',

        'We\xa0 Have urgent requirement for OKTA Experience-7 to 17 Years Shift Time- 6:00PM to 3:00AM JD Different applications integrations with Okta Troubleshoot the application login issues Handle tickets raised by the end users related to Okta sign on/application issues Taking care of the overall end-user experience Install & configure the Okta AD agent (if required) Import people from Active Directory Setup self-service in Okta Gather required information from Service Provider for applications integration Work with Okta support for troubleshooting Prepare KBs related to Okta Provide access for various applications to enable them for Single Sign On Set Up Multi Factor Authentications Addition of users to groups Creation of users & groups in Okta based on the requirement Interacting with clients and end users for the enhancements Open cases with Okta support for the resolution of any bugs identified Engage with vendor to investigate / resolve technical issues Provide required information and reports to the management to review the existing process Salary: Not Disclosed by Recruiter Industry: IT-Software / Software Services Functional Area: Other Employment Type: Permanent Job, Full Time',

        'Working with Organization Manufacturing committee on Manufacturing best practices Liaison with the Government officials in various ministries and network with the Industry stakeholders to get the inputs on manufacturing processes Work on organization various awards i.e. Quality, Safety and Manufacturing Excellence Awards Feedback to the industry after the awards about their good practices, areas of improvements etc. Handle important aspects of the Departments conference/ seminar Required Candidate profile Technical (Knowledge, Skills, Attitude) The candidate should have the basic understanding of the Manufacturing operations. He/ She should have good presentation skills, Interpersonal skills and should possess good writing & communication skills. Generic / Managerial The candidate should be self-driven and committed towards the work assigned. He/ She should be a good team player. Salary: INR 4,50,000 - 8,00,000 PA. Industry: NGO / Social Services / Regulators / Industry Associations Functional Area: Other Employment Type: Full Time, Permanent',

        'Workman/Foreman/Technician',

'ZS pioneers in sales force and marketing analytics applying optimization techniques to sales force and marketing investment problems. We have grown significantly and are now recognized global leaders in sales and marketing consulting. A key enabler of our services is leveraging data in delivering client solutions. The data available about customers across Healthcare and multiple industries is getting richer and the problems that our customers are trying to answer continue to evolve. In our endeavor to stay ahead of curve in providing solutions to these evolving complex business problems, ZS has set up a Data Scientist track which has following major focus areas: Research the evolving datasets and newer information sources to understand the possibilities Apply advanced analytical techniques and algorithms to improve current as well as develop cutting edge offerings/solutions Deliver client impact by collaboratively implementing and broad basing these solutions Provide thought leadership by developing the ZS Point of View in the industry The Manager position is the precursor to the Associate Principal and Principal Positions, and therefore part of the ZS leadership ladder. Every Manager leads one or more Spaces, i.e. business units focused either on a specific client, or a specific expertise area. Therefore ZS Data Science Managers are responsible for strong analytical expertise, knowledge and experience of various machine learning algorithms, tools & big data technologies, leveraging this knowledge for innovation, thought leadership, stakeholder relationship management, effectively coaching and responsible for people growth and defining-running-refining their space operating models, guided closely by Principals. Managers leverage their experience to take responsibility for providing analytical solutions across projects, deliver quality work for clients and lead client and ZS-leader relationships from beginning of their tenure. Provide expertise in architecting and implementing analytical solutions for projects Manage projects and assist in managing stakeholder relationships Direct multiple projects simultaneously, honing analytical and project management skills Motivate, coach and serve as a role model for space team members Provide thought leadership and innovation within projects and across practice areas Partner with onshore colleagues to develop new business with existing and new clients Develop and implement specific frameworks for strategy and programs Contribute to ZSs capability building and knowledge creation Coach, mentor, and conduct training programs Play an active role in India office growth related initiatives (e.g. recruiting, training, etc.). Required Candidate profile Managers have 8 - 12 years work experience in industry through consulting work or within an industry leader (a combination of experience is preferred) BE/ B.Tech / BS (stats) from Tier-1 institute would be required. PhD in Computer Science (OR Statistics) / M.Tech / MS from a premier institute would be highly preferred Substantial experience in Machine Learning Knowledge of big data/ advanced analytics concepts and algorithms text mining, social listening, recommender systems, predictive modeling, etc. Knowledge of programming Java/Python/R Exposure to tools/platforms Hadoop eco system and DB systems Agile project planning and project management skills Excellent communication skills In addition, we seek individuals with the following Desire to make a business impact for our clients Leadership experience Personal initiative and strong work ethic Self-motivation

and detail orientation Organization & planning skills Communication skills
Salary: Not Disclosed by Recruiter Industry: Strategy / Management Consulting
Firms Functional Area: Other',
        'axaxl.com', 'data scientist (internship)',
        'llegis Group India is a wholly owned subsidiary of Allegis Group, Inc.
In India, the company specifically focuses on dealing with Technology products
and providing high-end engineering design and analysis, IT and ITES
services,Vendor Management, Training and Staffing services to Fortune 500
clients. About Allegis Group: A US $6 billion world leader in staffing services
to over 4000 customers globally & largest Technology staffing company in the
world today. IT, Telecom, Infrastructure and Engineering . One of the worlds
largest privately held companies. The 6th Largest staffing company in the world
and the 2nd Largest in the US . One of the top vendors to 99% of Fortune 500
companies. Employees over 100,000 employees across different parts of the world.
Operations in North America, Europe and Asia with over 300 offices and now in
India',
        'opening For Data Scientist_Hyderabad'], dtype=object)

```python
[91]: merged_data = merged_data.drop(['company_name','skills_data2', 'skills_data3',
      ↪'location'], axis = 1)
```

```python
[93]: def combine_salaries(row):
          # Extract the values of salary columns, ensuring they are lists
          salary_sources = [
              row['avg_salary'] if isinstance(row['avg_salary'], list) else
      ↪[row['avg_salary']],
              row['salary_x'] if isinstance(row['salary_x'], list) else
      ↪[row['salary_x']],
              row['salary_data5'] if isinstance(row['salary_data5'], list) else
      ↪[row['salary_data5']],
              row['salary_y'] if isinstance(row['salary_y'], list) else
      ↪[row['salary_y']]
          ]

          # Flatten the list, filter out None or NaN values, and ensure uniqueness
      ↪with set()
          combined = []
          for salaries in salary_sources:
              # Filter out invalid entries (None, NaN, non-numeric)
              valid_salaries = [s for s in salaries if isinstance(s, (int, float))
      ↪and pd.notnull(s)]
              combined.extend(valid_salaries)  # Add valid entries to the combined
      ↪list

          return combined  # Return the list of valid salaries (no set for uniqueness)
```

```python
# Apply the function to merge the salaries
merged_data['average_salary'] = merged_data.apply(combine_salaries, axis=1)
```

[94]: `merged_data.info()`

```
<class 'pandas.core.frame.DataFrame'>
Index: 186336 entries, 0 to 193492
Data columns (total 10 columns):
 #   Column           Non-Null Count   Dtype
---  ------           --------------   -----
 0   job_title        186336 non-null  object
 1   avg_salary       72259 non-null   float64
 2   min_experience_x 158979 non-null  float64
 3   salary_x         186336 non-null  float64
 4   min_experience_y 185823 non-null  float64
 5   min_experience   158466 non-null  object
 6   salary_data5     186336 non-null  float64
 7   salary_y         186336 non-null  float64
 8   combined_skills  186336 non-null  object
 9   average_salary   186336 non-null  object
dtypes: float64(6), object(4)
memory usage: 15.6+ MB
```

[95]: `merged_data`

[95]:
	job_title	avg_salary
0	" Deeper understanding of Transfer Pricing as …	NaN
2	* A US based $4.0 billion world leader in staf…	NaN
3	* A US based $4.0 billion world leader in staf…	NaN
4	* TEKsystems is a part of Allegis Group -an $8…	NaN
5	- TEKsystems India is a wholly owned subsidiar…	NaN
…	…	…
193485	data scientist (internship)	NaN
193486	data scientist (internship)	NaN
193487	data scientist (internship)	NaN
193491	llegis Group India is a wholly owned subsidiar…	NaN
193492	opening For Data Scientist_Hyderabad	NaN

	min_experience_x	salary_x	min_experience_y	min_experience
0	NaN	750000.0	2.0	NaN
2	NaN	0.0	3.0	NaN
3	NaN	0.0	4.0	NaN
4	NaN	0.0	1.0	NaN
5	NaN	0.0	7.0	NaN
…	…	…	…	…
193485	0.0	0.0	NaN	NaN
193486	0.0	0.0	NaN	NaN

```
193487                 0.0      0.0              NaN          NaN
193491                 NaN 650000.0              3.0          NaN
193492                 2.0      0.0              NaN          NaN

        salary_data5  salary_y  \
0                0.0       0.0
2                0.0       0.0
3                0.0       0.0
4                0.0       0.0
5                0.0       0.0
...              ...       ...
193485           0.0       0.0
193486           0.0       0.0
193487           0.0       0.0
193491           0.0       0.0
193492           0.0       0.0

                                        combined_skills  \
0            ['transfer pricing', 'Transfer Pricing Complia…
2            ['Test Complete', 'ui testing', 'test engineer…
3            ['General Skills', 'Python', 'Automation Testi…
4            ['javascript', 'wcf', 'General Skills', 'web s…
5            ['kubernetes', 'prometeus', 'Continuous Integr…
...                                                      …
193485                      ['General Skills', 'Internship']
193486                      ['General Skills', 'Internship']
193487                      ['General Skills', 'Internship']
193491  ['Windows Server Administration', 'Operating S…
193492  ['SQL', 'HIVE', 'R', 'Python', 'General Skills…

               average_salary
0        [750000.0, 0.0, 0.0]
2             [0.0, 0.0, 0.0]
3             [0.0, 0.0, 0.0]
4             [0.0, 0.0, 0.0]
5             [0.0, 0.0, 0.0]
...                        …
193485        [0.0, 0.0, 0.0]
193486        [0.0, 0.0, 0.0]
193487        [0.0, 0.0, 0.0]
193491  [650000.0, 0.0, 0.0]
193492        [0.0, 0.0, 0.0]

[186336 rows x 10 columns]
```

```python
# Function to calculate the average of the salary list
def calculate_average(salary_list):
```

```
    if len(salary_list) > 0:  # Check if the list is not empty
        return sum(salary_list) / len(salary_list)
    else:
        return None  # Return None for empty lists

# Apply the function to calculate the average for each row
merged_data['average_salary_value'] = merged_data['average_salary'].
 ↪apply(lambda x: calculate_average(x))
print(merged_data[['average_salary', 'average_salary_value']])
```

```
            average_salary  average_salary_value
0       [750000.0, 0.0, 0.0]         250000.000000
2            [0.0, 0.0, 0.0]              0.000000
3            [0.0, 0.0, 0.0]              0.000000
4            [0.0, 0.0, 0.0]              0.000000
5            [0.0, 0.0, 0.0]              0.000000
...                      ...                   ...
193485       [0.0, 0.0, 0.0]              0.000000
193486       [0.0, 0.0, 0.0]              0.000000
193487       [0.0, 0.0, 0.0]              0.000000
193491  [650000.0, 0.0, 0.0]         216666.666667
193492       [0.0, 0.0, 0.0]              0.000000

[186336 rows x 2 columns]
```

[98]:
```
merged_data = merged_data.drop(['avg_salary',␣
 ↪'salary_x','salary_data5','salary_y','average_salary'], axis = 1)
```

[99]:
```
merged_data = merged_data[merged_data['average_salary_value'] > 150000]
merged_data = merged_data[merged_data['average_salary_value'] < 50000000]
```

[100]:
```
# Convert the 'average_salary_value' column to numeric, then to integer
merged_data['average_salary_value'] = pd.
 ↪to_numeric(merged_data['average_salary_value'], errors='coerce').astype(int)
```

[101]:
```
merged_data['average_salary_value'].unique()
```

[101]:
```
array([ 250000,  225000,  283333, …,  536333, 2500000,  229166])
```

[102]:
```
merged_data.rename(columns = {'average_salary_value' : 'avg_salary'})
```

[102]:
```
                                         job_title  min_experience_x  \
0        " Deeper understanding of Transfer Pricing as …               NaN
116      About TEKsystems:* TEKsystems provides global …               NaN
144      Accenture (NYSE: ACN) is a leading global prof…               NaN
147                                  Accessory Designer               NaN
254                          Accounts Executive/Accountant               NaN
```

```
       …                                                     …              …
193251                                          Web Designer             NaN
193255                                          Web Designer             NaN
193326                                             Webmaster             NaN
193406                          Workman/Foreman/Technician             NaN
193491  llegis Group India is a wholly owned subsidiar…             NaN


        min_experience_y min_experience  \
0                    2.0            NaN
116                  5.0            NaN
144                  6.0            NaN
147                  3.0            NaN
254                  2.0            NaN
…                    …              …
193251               4.0            NaN
193255               4.0            NaN
193326               2.0            NaN
193406               5.0            NaN
193491               3.0            NaN


                                     combined_skills  avg_salary
0            ['transfer pricing', 'Transfer Pricing Complia…      250000
116          ['Marketing Automation', 'General Skills', 'SQ…      225000
144          ['Dashboards', 'General Skills', 'Tableau', 'D…      283333
147          ['General Skills', ' Home Decor', ' bags', ' c…      266666
254          [' Internal Audit', ' SOX', 'General Skills', …      183333
…                                                    …              …
193251       [' web designing', ' css', ' flash', 'General …      166666
193255       [' web designer', ' web designing', ' website …      191666
193326       [' Team Building', 'General Skills', ' Web Pro…      162500
193406       [' Forklift', 'General Skills', ' Crane Operat…      275000
193491       ['Windows Server Administration', 'Operating S…      216666

[161235 rows x 6 columns]
```

```python
# Combine the experience columns into a list, handling cases where the values
 aren't lists
merged_data['combined_experience'] = merged_data.apply(
    lambda row: list(set(
        (row['min_experience_x'] if isinstance(row['min_experience_x'], list)
 else [row['min_experience_x']]) +
        (row['min_experience_y'] if isinstance(row['min_experience_y'], list)
 else [row['min_experience_y']]) +
        (row['min_experience'] if isinstance(row['min_experience'], list) else
 [row['min_experience']]))
    )), axis=1
)
```

```python
# Function to calculate the average of the experience list
def calculate_average_exp(experience_list):
    # Filter the experience_list to include only numeric values (ignore strings)
    numeric_list = [x for x in experience_list if isinstance(x, (int, float))]

    if len(numeric_list) > 0:  # Check if the filtered list is not empty
        return sum(numeric_list) / len(numeric_list)
    else:
        return None  # Return None for empty lists

# Apply the function to calculate the average for each row
merged_data['average_experience'] = merged_data['combined_experience'].
 ↪apply(calculate_average_exp)

# Print the updated DataFrame to check the result
print(merged_data[['min_experience_x', 'min_experience_y', 'min_experience',␣
 ↪'combined_experience', 'average_experience']])
```

```
        min_experience_x  min_experience_y min_experience combined_experience  \
0                    NaN               2.0            NaN     [2.0, nan, nan]
116                  NaN               5.0            NaN     [5.0, nan, nan]
144                  NaN               6.0            NaN     [nan, nan, 6.0]
147                  NaN               3.0            NaN     [3.0, nan, nan]
254                  NaN               2.0            NaN     [nan, 2.0, nan]
...                  ...               ...            ...                 ...
193251               NaN               4.0            NaN     [nan, nan, 4.0]
193255               NaN               4.0            NaN     [nan, nan, 4.0]
193326               NaN               2.0            NaN     [2.0, nan, nan]
193406               NaN               5.0            NaN     [nan, 5.0, nan]
193491               NaN               3.0            NaN     [nan, nan, 3.0]

        average_experience
0                      NaN
116                    NaN
144                    NaN
147                    NaN
254                    NaN
...                    ...
193251                 NaN
193255                 NaN
193326                 NaN
193406                 NaN
193491                 NaN

[161235 rows x 5 columns]
```

```
[104]: merged_data

[104]:                                               job_title  min_experience_x  \
       0          " Deeper understanding of Transfer Pricing as …            NaN
       116        About TEKsystems:* TEKsystems provides global …            NaN
       144        Accenture (NYSE: ACN) is a leading global prof…            NaN
       147                                    Accessory Designer            NaN
       254                            Accounts Executive/Accountant          NaN
       …                                                      …              …
       193251                                      Web Designer            NaN
       193255                                      Web Designer            NaN
       193326                                         Webmaster            NaN
       193406                          Workman/Foreman/Technician            NaN
       193491     llegis Group India is a wholly owned subsidiar…            NaN


                  min_experience_y min_experience  \
       0                       2.0            NaN
       116                     5.0            NaN
       144                     6.0            NaN
       147                     3.0            NaN
       254                     2.0            NaN
       …                         …              …
       193251                  4.0            NaN
       193255                  4.0            NaN
       193326                  2.0            NaN
       193406                  5.0            NaN
       193491                  3.0            NaN


                                            combined_skills  \
       0          ['transfer pricing', 'Transfer Pricing Complia…
       116        ['Marketing Automation', 'General Skills', 'SQ…
       144        ['Dashboards', 'General Skills', 'Tableau', 'D…
       147        ['General Skills', ' Home Decor', ' bags', ' c…
       254        [' Internal Audit', ' SOX', 'General Skills', …
       …                                                      …
       193251     [' web designing', ' css', ' flash', 'General …
       193255     [' web designer', ' web designing', ' website …
       193326     [' Team Building', 'General Skills', ' Web Pro…
       193406     [' Forklift', 'General Skills', ' Crane Operat…
       193491     ['Windows Server Administration', 'Operating S…


                  average_salary_value combined_experience  average_experience
       0                        250000      [2.0, nan, nan]                 NaN
       116                      225000      [5.0, nan, nan]                 NaN
       144                      283333      [nan, nan, 6.0]                 NaN
       147                      266666      [3.0, nan, nan]                 NaN
       254                      183333      [nan, 2.0, nan]                 NaN
```

```
        …                   …                    …                    …
193251            166666          [nan, nan, 4.0]                NaN
193255            191666          [nan, nan, 4.0]                NaN
193326            162500          [2.0, nan, nan]                NaN
193406            275000          [nan, 5.0, nan]                NaN
193491            216666          [nan, nan, 3.0]                NaN

[161235 rows x 8 columns]
```

[105]:
```python
merged_data = merged_data.drop(['min_experience_x', 'min_experience_y',
 ↪'min_experience', 'combined_experience'], axis = 1)
```

[106]:
```python
merged_data
```

[106]:
```
                                              job_title  \
0       " Deeper understanding of Transfer Pricing as …
116     About TEKsystems:* TEKsystems provides global …
144     Accenture (NYSE: ACN) is a leading global prof…
147                                   Accessory Designer
254                           Accounts Executive/Accountant
…                                                     …
193251                                       Web Designer
193255                                       Web Designer
193326                                          Webmaster
193406                           Workman/Foreman/Technician
193491  llegis Group India is a wholly owned subsidiar…

                                        combined_skills  \
0       ['transfer pricing', 'Transfer Pricing Complia…
116     ['Marketing Automation', 'General Skills', 'SQ…
144     ['Dashboards', 'General Skills', 'Tableau', 'D…
147     ['General Skills', ' Home Decor', ' bags', ' c…
254     [' Internal Audit', ' SOX', 'General Skills', …
…                                                     …
193251  [' web designing', ' css', ' flash', 'General …
193255  [' web designer', ' web designing', ' website …
193326  [' Team Building', 'General Skills', ' Web Pro…
193406  [' Forklift', 'General Skills', ' Crane Operat…
193491  ['Windows Server Administration', 'Operating S…

        average_salary_value  average_experience
0                     250000                 NaN
116                   225000                 NaN
144                   283333                 NaN
147                   266666                 NaN
254                   183333                 NaN
…                          …                   …
```

```
193251                166666              NaN
193255                191666              NaN
193326                162500              NaN
193406                275000              NaN
193491                216666              NaN
```

[161235 rows x 4 columns]

[107]:
```python
# Fill NaN values with 0
merged_data['average_experience'] = pd.
 ↪to_numeric(merged_data['average_experience'], errors='coerce').fillna(0)

# Convert to integer
merged_data['average_experience'] = merged_data['average_experience'].
 ↪astype(int)

# Check the result
merged_data
```

[107]:
```
                                                     job_title  \
0        " Deeper understanding of Transfer Pricing as …
116      About TEKsystems:* TEKsystems provides global …
144      Accenture (NYSE: ACN) is a leading global prof…
147                                    Accessory Designer
254                         Accounts Executive/Accountant
…                                                       …
193251                                      Web Designer
193255                                      Web Designer
193326                                          Webmaster
193406                         Workman/Foreman/Technician
193491   llegis Group India is a wholly owned subsidiar…


                                               combined_skills  \
0        ['transfer pricing', 'Transfer Pricing Complia…
116      ['Marketing Automation', 'General Skills', 'SQ…
144      ['Dashboards', 'General Skills', 'Tableau', 'D…
147      ['General Skills', ' Home Decor', ' bags', ' c…
254      [' Internal Audit', ' SOX', 'General Skills', …
…                                                       …
193251   [' web designing', ' css', ' flash', 'General …
193255   [' web designer', ' web designing', ' website …
193326   [' Team Building', 'General Skills', ' Web Pro…
193406   [' Forklift', 'General Skills', ' Crane Operat…
193491   ['Windows Server Administration', 'Operating S…


         average_salary_value   average_experience
0                      250000                    0
```

```
       116                 225000                    0
       144                 283333                    0
       147                 266666                    0
       254                 183333                    0
       ...                    ...                   ...
       193251              166666                    0
       193255              191666                    0
       193326              162500                    0
       193406              275000                    0
       193491              216666                    0

       [161235 rows x 4 columns]
```

[108]:
```python
merged_data.to_csv('Merged_data.csv')
```

[109]:
```python
merged_data = pd.read_csv('Merged_data.csv')
```

[110]:
```python
merged_data['job_title'] = merged_data['job_title'].str.lower()
```

[111]:
```python
# List of keywords to look for in job titles
keywords = [
    'Data Scientist', 'Business Analyst', 'Data Analyst', 'Data Engineer',
 'Machine Learning Engineer', 'Media Planning Manager', 'Sales Executive',
    'R&D Executive', 'Technical Support Engineer', 'Testing Engineer', 'System
 Analyst', 'Technical Architect',
    'Corporate Planning Strategy Manager', 'Webmaster', 'Software Developer',
 'Social Media Marketing Manager', 'Senior Design Engineer',
    'Accounts Manager', 'Sales Officer', 'Sales Business Development
 Manager','Quality Assurance Executive', 'Web Designer',
    'Area Sales Manager', 'System Administrator', 'Project Manager', 'Project
 Lead', 'Logistics Executive',
    'Accounts Executive','Technical Support Manager','Regional Manager','Team
 Leader','Content Developer','Database Administrator',
    'HR Executive''Project Architect''Front Office Manager''Design
 Engineer''Engineering Manager',
    'Training Manager','Graphic Designer','Client Servicing
 Executive','Recruitment Executive','Sales Coordinator',
    'Solution Architect','Foreman','Design Manager','Technical Lead','Analytics
 Manager','Trainee', 'Trainer'
    'SEO Specialist','Financial Analyst','PPC Specialist','Medical
 Representative','Production Manager','Public Relations Manager',
    'Medical Writer','IT Manager','Sales Trainer','Chef','Research
 Scientist','Merchandiser','Client Relationship Manager',
    'Logistics Manager','Purchase Executive','Telemarketing
 Executive','Visualiser','Creative Director','Finance Manager','Customer
 Support Engineer','Subject Matter Expert',
```

```python
    'Product Manager','Safety Manager','Maintenance Engineer','Quality Control␣
↪Manager','Project Manager - Manufacturing','Financial Controller','Sales␣
↪Head','Performance Manager',
    'Clinical Research Manager','Investment Manager','Cardiologist','Mechanical␣
↪Engineer','Soft Skills Trainer','Academic Teacher','Legal Manager',
    'Executive Chef','Insurance Analyst','Construction Manager','Senior␣
↪Consultant','Retail Manager','Operations Manager','Interior Designer',
    'Training Development Manager','System Integration Technician','Head of␣
↪Marketing','Health Officer','Accountant','Investment Treasury␣
↪Manager','Chief Medical Officer',
    'Web Developer','Database Architect','Art Director','User Experience␣
↪Designer','IT Technical Content Developer','Marketing Manager',
    'Regional Marketing Manager','Software Engineer','Technology Manager',␣
↪'Teacher', 'Sales', 'Associate Senior Associate'
]

# Convert keywords to lowercase for case-insensitive matching
keywords = [keyword.lower() for keyword in keywords]

# Function to replace job titles based on matching keywords
def find_and_replace_job_titles(title):
    # Convert title to lowercase and split by whitespace, '/', '&'
    title_lower_split = re.split(r'\s+|/|&', title.lower())  # Split by␣
 ↪whitespace, '/', and '&'

    # Check combinations of split parts against the keywords
    for keyword in keywords:
        keyword_parts = keyword.split()  # Split keyword into its parts
        # Check if the keyword is present in the segments
        if all(part in title_lower_split for part in keyword_parts):
            return keyword.title()  # Return the matching keyword (capitalized)␣
 ↪if found

    # If no keyword is found, merge the title back and return it as is
    return ' '.join(title_lower_split).title()

# Apply the function to the 'job_title' column
merged_data['job_title'] = merged_data['job_title'].
 ↪apply(find_and_replace_job_titles)

# Display unique job titles after replacement
print(merged_data['job_title'].unique())
```

['" Deeper Understanding Of Transfer Pricing As A Concept And Provisions Of Tp
Law (Definition Of Ae, Methods Etc.) In India. Basic Understanding Of Other
Direct Tax Concepts And Other Allied Laws. Good Communication Skills Oral As
Well As Written Knowing Business English Is Very Important. Understanding Of The

Clients Business And The Issues Involved. Personal Ownership For Own Work And
Performance Ability To Understand The Issues And Discuss The Same With Senior
Colleagues In A Proper Way To Keep Updated With Case Laws And Assist Senior
Colleagues In Application Of The Ratio Of The Judgements In The Assignments
Handled Personal Ownership (Responsibility And Accountability) For The Work And
Performance Ability To Learn New Skills, Share Knowledge And Experience To
Support Senior Colleague In The Assignments In A Fruitful Manner To Ensure That
The Risk And Other Policies Are Being Adhered To " Experience Is Tp Is
Mandatory. Interested Candidates Can Share Their Resume On Reetisingh@Gmail.Com
Or Can Call At 8355949358. Salary: Inr 6,00,000 - 9,00,000 Pa. Industry: Other
Functional Area: Other Employment Type: Permanent Job, Full Time'
 'About Teksystems:* Teksystems Provides Global It Professional Recruitment
Services To Help Organizations Achieve Their It And Business Goals.*We Provide
Service Across Applications, End User Support, It Leadership, Networks
Infrastructure, Project   Pmo*$3.8 Billion World Leader In Technology Staffing
Services*Wholly Owned Subsidiary Of Allegis Group, A $11 Billion
Enterprise*6,000+ Clients, With 98% Client Retention*Over 100 Locations
Throughout North America, Europe And Asia*5,000 Full Time Employees*Over 80,000
It Consultants Deployed Worldwide Annually*#1 Us Provider Of It Recruitment*Best
Of Staffing Client Satisfaction And Candidate Satisfaction By Inavero *Forbes
America\'S Best Employers List *We Have Been Listed In Fortune Magazine Under
"100 Best Companies To Work For" For 5 Consecutive Years*Please Visit -
Www.Teksystems.Com ; Www.Allegisgroup.Com, For More Information On Us.'
 'Accenture (Nyse: Acn) Is A Leading Global Professional Services Company,
Providing A Broad Range Of Services And Solutions In Strategy, Consulting,
Digital, Technology And Operations. Combining Unmatched Experience And
Specialized Skills Across More Than 40 Industries And All Business Functions
Underpinned By The Worlds Largest Delivery Network- Accenture Works At The
Intersection Of Business And Technology To Help Clients Improve Their
Performance And Create Sustainable Value For Their Stakeholders. With
Approximately 477,000 People Serving Clients In More Than 120 Countries,
Accenture Drives Innovation To Improve The Way The World Works And Lives.
Important Notice We Have Been Alerted To The Existence Of Fraudulent Messages
Asking Job Seekers To Set Up Payment To Cover Various Costs Associated With
Establishing Employment At Accenture. No One Is Ever Required To Pay For
Employment At Accenture. If You Are Contacted By Someone Asking For Payment,
Please Do Not Respond, And Contact Us At India.Fc.Check@Accenture.Com
Immediately.'
 'Accessory Designer' 'Accounts Executive' 'Accounts Manager'
 'Actuary Manager' 'Marketing Manager'
 "Allegis Group India Is A Wholly Owned Subsidiary Of Allegis Group, Inc. In
India, The Company Specifically Focuses On Dealing With Technology Products And
Providing High-End Engineering Design And Analysis, It And Ites Services,Vendor
Management, Training And Staffing Services To Fortune 500 Clients. About Allegis
Group: A Us $6Billion World Leader In Staffing Services To Over 4000 Customers
Globally World'S Largest Technology Staffing Company In The World Today It,
Telecom, Infrastructure And Engineering One Of The World'S Largest Privately
Held Companies (Source: Forbes) The 6Th Largest Staffing Company In The World

And The 2Nd Largest In The Us One Of The Top Vendors To 99% Of Fortune 500
Companies Employs Over 100,000 Employees Across Different Parts Of The World
Operations In North America, Europe And Asia With Over 300 Offices And Now In
India"

"Allegis Group India Is A Wholly Owned Subsidiary Of Allegis Group, Inc. In
India, The Company Specifically Focuses On Dealing With Technology Products And
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Companies Employs Over 100,000 Employees Across Different Parts Of The World
Operations In North America, Europe And Asia With Over 300 Offices And Now In
India"

'Anaesthetist' 'Analyst' 'Analytical Chemistry Associate Scientist'
'Analytics Manager' 'Animation Designer' 'Apparel Garment Designer'
'Architect' 'Area   Territory Manager' 'Area Sales Manager'
'Art Director' 'Asset Manager'
'Assistant Manager Manager -(Nontechnical)'
'Assistant Manager Manager-(Nontechnical)'
'Assistant Manager Manager-(Technical)' 'Assistant Professor'
'Associate Senior Associate' 'Audit Manager' 'Back Office Executive'
'Beauty Manager   Beautician' 'Bio-Statistician' 'Research Scientist'
'Teacher' 'Branch Manager' 'Regional Manager' 'Broker Trader'
'Business Alliances Manager' 'Business Analyst'
'Business Development Manager' 'Cio' 'Csr Manager' 'Cabin Crew'
'Cardiologist' 'Cards-Operations Manager' 'Accountant'
'Chief Medical Officer' 'Client Relationship Manager'
'Client Servicing Executive' 'Client Servicing Key Account Manager'
'Clinical Research Manager' 'Collections Manager' 'Commercial Artist'
'Commercial Manager' 'Company Secretary'
'Construction-Construction Management' 'Construction-General Building'
'Construction-Heavy' 'Construction-Residential' 'Construction-Specialty'
'Content Developer' 'Copywriter' 'Corporate Communication Executive'
'Corporate Planning Strategy Manager'
'Correspondent Assistant Editor Associate Editor' 'Counselor'
'Creative Director' 'Credit Analyst-Corporate Banking' 'Credit Officer'
'Credit Control Executive' 'Credit Control Manager' 'Curriculum Designer'
'Customer Support Engineer' 'Dba' 'Data Analyst' 'Data Engineer'
'Data Scientist' 'Database Architect' 'Datawarehousing Technician'
'Dean   Director' 'Dermatologist' 'Design Engineer' 'Design Manager'
'Direct Marketing Executive' 'Documentation Medical Writing'
'Documentation Shipping-Executive Manager' 'Erp Consultant'
'Electrical Engineer-Industrial' 'Electrical Engineer-Utility'
'Engaging With The Senior Leadership And Middle Management Of The Tax And
Advisory Functions In The Region. Working On E-Tds Return, Tax Clearance

Preparation, Teq Preparation, Counselling Minutes Notes Preparation, Tax Return, Pan Application And Technical Research. Ensuring Transition Plans And Migration Resources Are In Place, Slas Are Agreed And Service Delivery Is Maintained During The Transition Supporting The Development Of Ramp-Up Plans And Building Of Profiles On Basis Of Service Line Demands Managing And Resolving Escalations That Have Impact On Critical Path Of Service Delivery Taking Regular Feedback From Client Service Teams On Services Delivered From Icoe Reviewing Performance Of Icoe Against Agreed Kpis And Their Compliance To Slas And Reverse Slas At Regional Leve Promoting A Kpmg Centric And Partnership Approach To Develop Strong Relationships With Other Working Groups And Ensure Adherence To Group Governance Monitoring The Reports Being Sent Regarding Icoe Performance Exceptions Handling And Reporting - Perform Root Cause Analysis For Low Cft Score Or Sla Non-Compliance And Take Corrective Action Interested Candidates Can Share Their Their Resume On Reetisingh@Kpmg.Com Salary: Inr 8,00,000 - 9,00,000 Pa. Industry: Other Functional Area: Other Employment Type: Permanent Job, Full Time'
 'Engineering Manager' 'Environment Engineer Officer' 'Equity Analyst'
 'Events Promotion Executive' 'Events Promotion Manager' 'Chef'
 'Executive Sr Executive - Administration' 'Factory Head'
 'Finance Executive' 'Finance Manager' 'Financial Analyst'
 'Fitness Trainer Gym Instructor' 'Ford' 'Forex Dealer'
 'Formulation Scientist' 'Fresher'
 'Front Office Guest Relations Executive Manager'
 'Functional Outside Consultant' 'Fund Manager-Equity' 'Sales Head'
 'General Manager' 'General Practitioner' 'Graphic Designer'
 'Web Designer' 'Gynaeocologist' 'Hod' 'Hr Business Partner'
 'Hr Executive' 'Hr Manager' 'Hardware Design Engineer'
 'Head Vp Gm-Taxation' 'Head Manager Gm-Media Planning'
 'Head Vp Gm - Analytics Bi' 'Head Vp Gm-Accounts'
 'Head Vp Gm-Administration Facilities' 'Head Vp Gm-Broking'
 'Financial Controller' 'Head Vp Gm-Client Servicing'
 'Head Vp Gm-Commercial' 'Head Vp Gm-Compensation Benefits'
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 'Head Vp Gm-Credit Risk' 'Head Vp Gm-Finance Audit' 'Head Vp Gm-Hr'
 'Head Vp Gm-Investment Banking' 'Head Vp Gm-Marketing'
 'Head Vp Gm-Mergers Acquisitions' 'Head Vp Gm-Operations'
 'Head Vp Gm-Production Manufacturing Maintenance'
 'Head Vp Gm-Purchase Material Management'
 'Head Vp Gm-Quality Assurance Quality Control' 'Head Vp Gm-R D'
 'Head Vp Gm-Recruitment' 'Head Vp Gm-Regulatory Affairs'
 'Head Vp Gm-Scm Logistics' 'Head Vp Gm-Sales'
 'Head Vp Gm-Technology(It) Cto' 'Head Vp Gm-Training Development'
 'Head Vp Gm-Transitions' 'Head Vp Gm-Underwriting'
 'Head Vp Gm Mgr-Online Digital Marketing'
 'Head Vp Gm National Manager -Sales' 'Head Vp Gm National Manager-Sales'
 'Hotel Seven Seas, An Extraordinary Symbol Of Chic, Opulence And Sophistication, Provides A Signature Experience To Cherish For A Lifetime With Its Classic European Architecture And Avant-Garde Design. Started In 1995, Seven

Seas Hospitality Owns And Operates Four Banquet Halls In Delhi And Has Been
Recording An Annual Growth Of 20-30 Per Cent Year-On-Year. Located 22 Km From
Indira Gandhi International Airport, 16 Km From New Delhi Railway Station And 12
Km From Central Delhi, Hotel Seven Seas Is A Premier Luxury Destination And The
Perfect Choice For Business And Social Events. The Property Will Boast Of Total
Meeting Space Of 1,00,000 Sq Ft Area, Which Can Accommodate Upto 4000 Guests, 3
Lavish Banquet Halls And Rooms In Size Options From 15000 Sq Ft To 25000 Sq Ft 2
Two Nightclubs, A Shopping Complex Of 6000 Sq Feet, An All-Day Dining Multi
Cuisine Restaurant And A Specialty Restaurant Cum Bar. Other Facilities Will
Include A Health Club, Steam, Sauna, Jacuzzi And Swimming Pool. The Group Is
Also Exploring The Possibility Of Opening Another Hotel, Post The Completion Of
This Ambitious Project, In Gurgaon By 2016. However, This Is Still Under
Planning Stage. The Brand New Luxury Hotel Seven Seas Has Over 100 Contemporary
Designed Well Appointed Rooms. All Our Rooms Come With Luxurious Plush Beddings,
Upgraded Bath Amenities; Flat Screen Television, Spacious Work Areas With High
Speed Internet Access,'
 'Icwa' 'It Networking-Manager' 'Industrial Labour Relations Manager'
 'Technology Manager' 'Sales Business Development Manager'
 'Instructional Designer' 'Insurance Analyst' 'Operations Manager'
 'Insurance Operations Officer' 'Interior Designer' 'Investment Manager'
 'Investor Relationship-Executive Manager' 'Journalist'
 'Key Account Manager' 'Lecturer Professor' 'Legal Manager'
 'Lobby Duty Manager' 'Logistics Executive' 'Logistics Manager'
 'Machine Learning Engineer' 'Maintenance Engineer'
 'Management Information Systems(Mis)-Manager'
 'Manager - Market Research Consumer Insights Industry Analysis'
 'Manager Sr Manager - Administration'
 'Manager Sr Manager - Facility Management'
 'Material Management Executive Manager'
 'Mechanical Engineer-Plumbing Fire Protection' 'Media Planning Manager'
 'Medical Officer' 'Medical Representative' 'Medical Transcriptionist'
 'Merchandiser' 'National Head' 'Network Administrator' 'Neurologist'
 'Orthopaedist' 'Other' 'Outside Consultant'
 'Outside Technical Consultant' 'Ppc Pay Per Click Lead' 'Ppc Specialist'
 'Pay Roll Compensation Manager' 'Pediatrician'
 'People Are At The Heart Of Every Successful Business Initiative. At
Teksystems, A Leading Provider Of It Staffing And It Services, We Understand
People. Every Year We Deploy Over 80,000 It Professionals At 6,000 Client Sites
Across North America, Europe And Asia. Our Deep Insights Into The It Labor
Market Enable Us To Help Clients Achieve Their Business Goals-While Optimizing
Their It Workforce Strategies.'
 'Performance Manager' 'Practice Head Practice Manager' 'Sales'
 'Product Designer' 'Product Development Executive' 'Product Manager'
 'Production Manager' 'Program Manager' 'Project Architect'
 'Project Manager' 'Project Lead' 'Project Manager-It Software'
 'Project Manager-Production Manufacturing Maintenance'
 'Project Manager-Telecom' 'Public Relations Manager' 'Purchase Executive'
 'Purchase Officer' 'Purchase Vendor Development Manager'

'Quality Assurance   Quality Control-Manager'
'Quality Assurance Executive' 'Quality Control Manager' 'R D Executive'
'Rf System Designer' 'Rfi   Rfp Manager' 'Radiologist'
'Recruitment Executive' 'Recruitment Manager'
'Regulatory Affairs Manager' 'Relationship Executive' 'Release Manager'
'Research Associate' 'Restaurant Manager' 'Retail Manager'
'Safety Manager' 'Sales Coordinator' 'Sales Executive' 'Sales Officer'
'Sales Trainer' 'Search Engine Optimisation Seo Lead'
'Search Engine Optimisation Seo Specialist' 'Senior Design Engineer'
'Senior Consultant' 'Service Delivery Leader' 'Service Manager'
'Social Media Marketing Manager' 'Soft Skill Trainer'
'Soft Skills Trainer' 'Software Developer' 'Software Engineer'
'Solution Architect' 'Visualiser' 'Staff Function'
'Staffing Specialist Manpower Planning'
'Store Keeper Warehouse Assistant' 'Subject Matter Expert' 'Surgeon'
'System Administrator' 'System Analyst' 'System Integration Technician'
'System Security'
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Across The Globe. Tgs Accounts For $600 Million And Has About 5000 Full Time
Employees Across The Globe Of Which 1200 Are In India. Tgs Operates Through
Multiple Solution Centers Across Locations Like Us (Dallas, Redmond,
Bloomington, Baltimore, Maryland), Europe (Amsterdam, London), Canada, Manila
And India (Bangalore And Hyderabad). We Are An Iso 27001 Certified Organization'
'Taxation(Direct) Manager' 'Taxation(Indirect) Manager' 'Technical Lead'
'Team Leader' 'Team Leader-Quality Assurance Quality Control'
'Technical   Process Trainer' 'Technical Architect'
'Technical Support Engineer' 'Technical Support Manager'
'Telemarketing Executive' 'Testing Engineer' 'Textile Designer'
'The Glove' 'Tour Management Manager Senior Manager' 'Trainee' 'Trainer'
'Trainer Faculty' 'Training Manager' 'Transitions Migrations Manager'
'Transport Distribution Manager' 'Travel Agent' 'Treasury Manager'
'Underwriter'
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Of It Services, Software, And Technology That Solves Critical Problems For
Clients. We Specialize In Helping Clients Secure Their Operations, Increase The
Efficiency And Utilization Of Their Data Centers, Enhance Support To Their End
Users And Constituents, And Modernize Their Enterprise Applications. To Provide
These Services And Solutions, We Bring Together Offerings And Capabilities In
Outsourcing Services, Systems Integration And Consulting Services,
Infrastructure Services, Maintenance Services, And High-End Server Technology.
Unisys India Was Established In 2004 In Bangalore. We Have Strengthened
Tremendously In Terms Of Headcount And Infrastructure, As Well As Capabilities
To Become An Integral Part Of The Unisys Global Delivery Organization. Today, We
Have Three State-Of-The-Art Facilities - Two In Bangalore And One In Hyderabad.
At Unisys India You Will See A Representation From Most Functions Of Unisys. Be
It Product Development For Systems   Technology, Application Design And
Migration For Global Industries, Service Desk   Enterprise Computing   Itil

Processes   Field Operations Back Office For Gois Or Extensions Of Various
Unisys Corporate Functions. We Are Here Today Because Of Our Relentless Efforts
Towards Timely, Quality And Cost Efficient Deliveries, All Meant To Drive A High
Level Of Customer Satisfaction At A Compelling Cost. A Unique Blend Of Mature
Processes, High Focus On Tools And, Above All A Team Of Highly Talented And
Motivated Employees Play A Critical Role In Making This Possible. We Are Poised
To Play An Increasingly Important Role In Unisys Journey Towards Predictable And
Profitable Growth. You Could Be A Part Of This Change. Imagine It. Done. For
More Information, Visit Http: Www.Unisys.Com'
 'User Experience Designer' 'Voice   Accent Trainer' 'Warehouse Manager'
 'Wealth Manager' 'Webmaster' 'Foreman'
 'Llegis Group India Is A Wholly Owned Subsidiary Of Allegis Group, Inc. In
India, The Company Specifically Focuses On Dealing With Technology Products And
Providing High-End Engineering Design And Analysis, It And Ites Services,Vendor
Management, Training And Staffing Services To Fortune 500 Clients. About Allegis
Group: A Us $6 Billion World Leader In Staffing Services To Over 4000 Customers
Globally   Largest Technology Staffing Company In The World Today. It, Telecom,
Infrastructure And Engineering . One Of The Worlds Largest Privately Held
Companies. The 6Th Largest Staffing Company In The World And The 2Nd Largest In
The Us . One Of The Top Vendors To 99% Of Fortune 500 Companies. Employees Over
100,000 Employees Across Different Parts Of The World. Operations In North
America, Europe And Asia With Over 300 Offices And Now In India']

[112]:
```python
# Mapping for job title consolidation
title_mapping = {
    # Existing mappings
    'Business Analyst': 'Business Analyst',
    'Financial Analyst': 'Business Analyst',
    'Sales Executive': 'Sales Manager',
    'Sales Officer': 'Sales Manager',
    'Area Sales Manager': 'Sales Manager',
    'Sales Coordinator': 'Sales Manager',
    'Project Manager': 'Project Manager',
    'Project Lead': 'Project Manager',
    'Associate Senior Associate': 'Project Manager',
    'Project Architect': 'Project Manager',
    'Technical Support Engineer': 'Technical Support Manager',
    'Technical Support Manager': 'Technical Support Manager',
    'Software Developer': 'Software Developer',
    'Software Engineer': 'Software Developer',
    'Quality Assurance Executive': 'Quality Assurance Manager',
    'Quality Control Manager': 'Quality Assurance Manager',
    'Social Media Marketing Manager': 'Marketing Manager',
    'Marketing Manager': 'Marketing Manager',
    'Sales': 'Marketing Manager',
    'Direct Marketing Executive': 'Marketing Manager',
    'HR Executive': 'Human Resources Manager',
```

```python
    'HR Manager': 'Human Resources Manager',
    'Recruitment Manager': 'Human Resources Manager',
    'Graphic Designer': 'Creative Director',
    'User Experience Designer': 'Creative Director',
    'Copywriter': 'Creative Director',
    'Logistics Executive': 'Logistics Manager',
    'Logistics Manager': 'Logistics Manager',
    'Operations Manager': 'Operations Manager',
    'Facility Management Manager': 'Operations Manager',
    'Trainee': 'Training Manager',
    'Teacher': 'Training Manager',
    'Trainer': 'Training Manager',
    'Training Manager': 'Training Manager',
    'Soft Skills Trainer': 'Training Manager',
    'Research Scientist': 'Research Manager',
    'Clinical Research Manager': 'Research Manager',
    'Client Servicing Executive': 'Client Relationship Manager',
    'Client Relationship Manager': 'Client Relationship Manager',

    # New mappings based on the provided titles
    'Accessory Designer': 'Creative Director',
    'Accountant': 'Accountant',
    'Accounts Executive': 'Accounts Manager',
    'Accounts Manager': 'Accounts Manager',
    'Actuary Manager': 'Finance Manager',
    'Analyst': 'Data Analyst',
    'Analytics Manager': 'Data Analyst',
    'Animation Designer': 'Creative Director',
    'Architect': 'Architect',
    'Area Territory Manager': 'Sales Manager',
    'Art Director': 'Creative Director',
    'Asset Manager': 'Finance Manager',
    'Assistant Manager Manager -(Nontechnical)': 'Manager',
    'Assistant Manager Manager-(Technical)': 'Manager',
    'Assistant Professor': 'Professor',
    'Audit Manager': 'Finance Manager',
    'Back Office Executive': 'Administrative Assistant',
    'Beauty Manager Beautician': 'Beauty Manager',
    'Bio-Statistician': 'Data Analyst',
    'Branch Manager': 'Operations Manager',
    'Broker Trader': 'Finance Manager',
    'Business Alliances Manager': 'Business Development Manager',
    'Business Development Manager': 'Business Development Manager',
    'Cabin Crew': 'Customer Service',
    'Cardiologist': 'Medical Doctor',
    'Chef': 'Culinary Specialist',
    'Chief Medical Officer': 'Medical Director',
```

```
    'Client Servicing Key Account Manager': 'Client Relationship Manager',
    'Collections Manager': 'Finance Manager',
    'Commercial Artist': 'Creative Director',
    'Commercial Manager': 'Sales Manager',
    'Company Secretary': 'Corporate Secretary',
    'Construction-Construction Management': 'Project Manager',
    'Content Developer': 'Content Writer',
    'Corporate Communication Executive': 'Corporate Communications Manager',
    'Corporate Planning Strategy Manager': 'Strategic Manager',
    'Counselor': 'Counselor',
    'Credit Analyst-Corporate Banking': 'Finance Manager',
    'Credit Control Manager': 'Finance Manager',
    'Credit Officer': 'Finance Manager',
    'Csr Manager': 'CSR Manager',
    'Curriculum Designer': 'Educational Designer',
    'Customer Support Engineer': 'Technical Support',
    'Database Architect': 'Database Administrator',
    'Datawarehousing Technician': 'Data Engineer',
    'Dba': 'Database Administrator',
    'Dean Director': 'Director',
    'Dermatologist': 'Medical Doctor',
    'Design Engineer': 'Engineering Manager',
    'Electrical Engineer-Industrial': 'Electrical Engineer',
    'Electrical Engineer-Utility': 'Electrical Engineer',
    'Engineering Manager': 'Engineering Manager',
    'Environment Engineer Officer': 'Environmental Engineer',
    'Equity Analyst': 'Finance Manager',
    'Erp Consultant': 'Consultant',
    'Events Promotion Executive': 'Marketing Executive',
    'Events Promotion Manager': 'Marketing Manager',
    'Executive Sr Executive - Administration': 'Administrative Executive',
    'Factory Head': 'Operations Manager',
    'Finance Executive': 'Finance Manager',
    'Finance Manager': 'Finance Manager',
    'Financial Controller': 'Finance Manager',
    'Fitness Trainer Gym Instructor': 'Fitness Trainer',
    'Foreman': 'Operations Manager',
    'Forex Dealer': 'Finance Manager',
    'Formulation Scientist': 'Research Scientist',
    'Fresher': 'Entry Level',
    'Front Office Guest Relations Executive Manager': 'Customer Service␣
↪Manager',
    'Functional Outside Consultant': 'Consultant',
    'Fund Manager-Equity': 'Finance Manager',
    'General Manager': 'Operations Manager',
    'General Practitioner': 'Medical Doctor',
    'Gynaeocologist': 'Medical Doctor',
```

```
    'Hardware Design Engineer': 'Engineering Manager',
    'Head Manager Gm-Media Planning': 'Media Manager',
    'Head Vp Gm - Analytics Bi': 'Data Analytics Manager',
    'Head Vp Gm Mgr-Online Digital Marketing': 'Digital Marketing Manager',
    'Head Vp Gm National Manager -Sales': 'Sales Manager',
    'Head Vp Gm-Accounts': 'Finance Manager',
    'Head Vp Gm-Administration Facilities': 'Operations Manager',
    'Head Vp Gm-Broking': 'Broker Manager',
    'Head Vp Gm-Client Servicing': 'Client Relationship Manager',
    'Head Vp Gm-Commercial': 'Commercial Manager',
    'Head Vp Gm-Compensation Benefits': 'HR Manager',
    'Head Vp Gm-Corporate Advisory': 'Corporate Advisor',
    'Head Vp Gm-Corporate Planning Strategy': 'Strategic Manager',
    'Head Vp Gm-Credit Risk': 'Risk Manager',
    'Head Vp Gm-Finance Audit': 'Finance Manager',
    'Head Vp Gm-Hr': 'HR Manager',
    'Head Vp Gm-Investment Banking': 'Finance Manager',
    'Head Vp Gm-Marketing': 'Marketing Manager',
    'Head Vp Gm-Mergers Acquisitions': 'M&A Manager',
    'Head Vp Gm-Operations': 'Operations Manager',
    'Head Vp Gm-Production Manufacturing Maintenance': 'Production Manager',
    'Head Vp Gm-Purchase Material Management': 'Purchasing Manager',
    'Head Vp Gm-Quality Assurance Quality Control': 'Quality Assurance Manager',
    'Head Vp Gm-R D': 'R&D Manager',
    'Head Vp Gm-Recruitment': 'Recruitment Manager',
    'Head Vp Gm-Regulatory Affairs': 'Regulatory Affairs Manager',
    'Head Vp Gm-Sales': 'Sales Manager',
    'Head Vp Gm-Scm Logistics': 'Logistics Manager',
    'Head Vp Gm-Taxation': 'Tax Manager',
    'Head Vp Gm-Technology(It) Cto': 'CTO',
    'Head Vp Gm-Training Development': 'Training Manager',
    'Head Vp Gm-Transitions': 'Transition Manager',
    'Head Vp Gm-Underwriting': 'Underwriting Manager',
    'Hr Business Partner': 'HR Manager',
    'Hr Executive': 'HR Executive',
    'Hr Manager': 'HR Manager',
    'Human Resources Manager': 'HR Manager',
    'Icwa': 'Finance Manager',
    'Industrial Labour Relations Manager': 'HR Manager',
    'Instructional Designer': 'Educational Designer',
    'Insurance Analyst': 'Finance Manager',
    'Insurance Operations Officer': 'Insurance Officer',
    'Interior Designer': 'Designer',
    'Investment Manager': 'Finance Manager',
    'Investor Relationship-Executive Manager': 'Investor Relations Manager',
    'It Networking-Manager': 'IT Manager',
    'Journalist': 'Writer',
```

```python
    'Key Account Manager': 'Client Relationship Manager',
    'Lecturer Professor': 'Professor',
    'Legal Manager': 'Legal Advisor',
    'Lobby Duty Manager': 'Operations Manager',
    'Machine Learning Engineer': 'Data Scientist',
    'Maintenance Engineer': 'Engineering Manager',
    'Management Information Systems(Mis)-Manager': 'MIS Manager',
    'Manager - Market Research Consumer Insights Industry Analysis': 'Market␣
↪Research Manager',
    'Manager Sr Manager - Administration': 'Administrative Manager',
    'Manager Sr Manager - Facility Management': 'Facility Manager',
    'Marketing Manager': 'Marketing Manager',
    'Material Management Executive Manager': 'Material Manager',
    'Mechanical Engineer-Plumbing Fire Protection': 'Mechanical Engineer',
    'Media Planning Manager': 'Media Manager',
    'Medical Officer': 'Medical Doctor',
    'Medical Representative': 'Sales Representative',
    'Medical Transcriptionist': 'Medical Transcriptionist',
    'Merchandiser': 'Sales Manager',
    'National Head': 'Director',
    'Network Administrator': 'IT Manager',
    'Nursing Supervisor': 'Nursing Manager',
    'Operations Executive': 'Operations Executive',
    'Operations Manager': 'Operations Manager',
    'Operations Senior Executive': 'Operations Executive',
    'Pharmacist': 'Pharmaceutical Specialist',
    'Physiotherapist': 'Medical Doctor',
    'Project Coordinator': 'Project Manager',
    'Project Leader': 'Project Manager',
    'Public Relations Executive Manager': 'Public Relations Manager',
    'Quality Assurance Engineer': 'Quality Assurance Manager',
    'Quality Manager': 'Quality Assurance Manager',
    'Recruiter': 'Recruitment Manager',
    'Regional Head': 'Director',
    'Research Associate': 'Research Scientist',
    'Research Consultant': 'Research Consultant',
    'Research Manager': 'Research Manager',
    'Sales Manager': 'Sales Manager',
    'Sales Officer': 'Sales Manager',
    'Sales Representative': 'Sales Manager',
    'Sales Support Executive': 'Sales Support',
    'Sales Trainee': 'Sales Trainee',
    'Senior Account Manager': 'Accounts Manager',
    'Senior Analyst': 'Data Analyst',
    'Senior Business Analyst': 'Business Analyst',
    'Senior Data Analyst': 'Data Analyst',
    'Senior Finance Manager': 'Finance Manager',
```

```python
    'Senior Hr Executive': 'HR Executive',
    'Senior Software Developer': 'Software Developer',
    'Software Architect': 'Software Developer',
    'Software Engineer': 'Software Developer',
    'Software Quality Assurance Engineer': 'Quality Assurance Manager',
    'Solution Architect': 'Solution Architect',
    'Sr Associate Director': 'Director',
    'Sr Manager - Quality Assurance Quality Control': 'Quality Assurance⏎
↪Manager',
    'Sr Project Manager': 'Project Manager',
    'Sr Software Developer': 'Software Developer',
    'Store Manager': 'Operations Manager',
    'Strategic Alliances Manager': 'Business Development Manager',
    'Strategy Consultant': 'Consultant',
    'Tax Consultant': 'Finance Manager',
    'Teacher': 'Teacher',
    'Telecalling Executive': 'Telecaller',
    'Telemarketing Executive': 'Telecaller',
    'Training Coordinator': 'Training Manager',
    'Training Head': 'Training Manager',
    'Transport Manager': 'Logistics Manager',
    'Ui Ux Designer': 'Creative Director',
    'Underwriter': 'Underwriting Manager',
    'Wealth Manager' : 'Finance Manager',
    'Web Developer': 'Web Developer',
    'Web Designer' : 'Web Developer',
    'Webmaster' : 'Web Developer',
    'Writer': 'Writer',

}


# Function to map job titles
def map_job_title(title):
    return title_mapping.get(title, title)

# Apply the mapping function
merged_data['job_title'] = merged_data['job_title'].apply(map_job_title)

# Title case the job titles
merged_data['job_title'] = merged_data['job_title'].str.title()

# Print unique job titles
print(sorted(merged_data['job_title'].unique()))
```

['" Deeper Understanding Of Transfer Pricing As A Concept And Provisions Of Tp
Law (Definition Of Ae, Methods Etc.) In India. Basic Understanding Of Other
Direct Tax Concepts And Other Allied Laws. Good Communication Skills Oral As

Well As Written Knowing Business English Is Very Important. Understanding Of The
Clients Business And The Issues Involved. Personal Ownership For Own Work And
Performance Ability To Understand The Issues And Discuss The Same With Senior
Colleagues In A Proper Way To Keep Updated With Case Laws And Assist Senior
Colleagues In Application Of The Ratio Of The Judgements In The Assignments
Handled Personal Ownership (Responsibility And Accountability) For The Work And
Performance Ability To Learn New Skills, Share Knowledge And Experience To
Support Senior Colleague In The Assignments In A Fruitful Manner To Ensure That
The Risk And Other Policies Are Being Adhered To " Experience Is Tp Is
Mandatory. Interested Candidates Can Share Their Resume On Reetisingh@Gmail.Com
Or Can Call At 8355949358. Salary: Inr 6,00,000 - 9,00,000 Pa. Industry: Other
Functional Area: Other Employment Type: Permanent Job, Full Time', 'About
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Help Organizations Achieve Their It And Business Goals.*We Provide Service
Across Applications, End User Support, It Leadership, Networks Infrastructure,
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Owned Subsidary Of Allegis Group, A $11 Billion Enterprise*6,000+ Clients, With
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Professional Services Company, Providing A Broad Range Of Services And Solutions
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Experience And Specialized Skills Across More Than 40 Industries And All
Business Functions Underpinned By The Worlds Largest Delivery Network- Accenture
Works At The Intersection Of Business And Technology To Help Clients Improve
Their Performance And Create Sustainable Value For Their Stakeholders. With
Approximately 477,000 People Serving Clients In More Than 120 Countries,
Accenture Drives Innovation To Improve The Way The World Works And Lives.
Important Notice We Have Been Alerted To The Existence Of Fraudulent Messages
Asking Job Seekers To Set Up Payment To Cover Various Costs Associated With
Establishing Employment At Accenture. No One Is Ever Required To Pay For
Employment At Accenture. If You Are Contacted By Someone Asking For Payment,
Please Do Not Respond, And Contact Us At India.Fc.Check@Accenture.Com
Immediately.', 'Accountant', 'Accounts Manager', 'Administrative Assistant',
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Management, Training And Staffing Services To Fortune 500 Clients. About Allegis
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Globally World'S Largest Technology Staffing Company In The World Today It,
Telecom, Infrastructure And Engineering One Of The World'S Largest Privately
Held Companies (Source: Forbes) The 6Th Largest Staffing Company In The World
And The 2Nd Largest In The Us One Of The Top Vendors To 99% Of Fortune 500
Companies Employs Over 100,000 Employees Across Different Parts Of The World

Operations In North America, Europe And Asia With Over 300 Offices And Now In
India", "Allegis Group India Is A Wholly Owned Subsidiary Of Allegis Group, Inc.
In India, The Company Specifically Focuses On Dealing With Technology Products
And Providing High-End Engineering Design And Analysis, It And Ites
Services,Vendor Management, Training And Staffing Services To Fortune 500
Clients.About Allegis Group: A Us $6Billion World Leader In Staffing Services To
Over 4000 Customers Globally World'S Largest Technology Staffing Company In The
World Today It, Telecom, Infrastructure And Engineering Brone Of The World'S
Largest Privately Held Companies (Source: Forbes) The 6Th Largest Staffing
Company In The World And The 2Nd Largest In The Us One Of The Top Vendors To 99%
Of Fortune 500 Companies Employs Over 100,000 Employees Across Different Parts
Of The World Operations In North America, Europe And Asia With Over 300 Offices
And Now In India", 'Anaesthetist', 'Analytical Chemistry Associate Scientist',
'Apparel Garment Designer', 'Architect', 'Area   Territory Manager', 'Assistant
Manager Manager-(Nontechnical)', 'Beauty Manager   Beautician', 'Broker
Manager', 'Business Analyst', 'Business Development Manager', 'Cards-Operations
Manager', 'Cio', 'Client Relationship Manager', 'Commercial Manager',
'Construction-General Building', 'Construction-Heavy', 'Construction-
Residential', 'Construction-Specialty', 'Consultant', 'Content Writer',
'Corporate Advisor', 'Corporate Communications Manager', 'Corporate Secretary',
'Correspondent Assistant Editor Associate Editor', 'Counselor', 'Creative
Director', 'Credit Control Executive', 'Csr Manager', 'Cto', 'Culinary
Specialist', 'Customer Service', 'Customer Service Manager', 'Data Analyst',
'Data Engineer', 'Data Scientist', 'Database Administrator', 'Dean   Director',
'Design Manager', 'Designer', 'Director', 'Documentation Medical Writing',
'Documentation Shipping-Executive Manager', 'Educational Designer', 'Electrical
Engineer', 'Engaging With The Senior Leadership And Middle Management Of The Tax
And Advisory Functions In The Region. Working On E-Tds Return, Tax Clearance
Preparation, Teq Preparation, Counselling Minutes Notes Preparation, Tax Return,
Pan Application And Technical Research. Ensuring Transition Plans And Migration
Resources Are In Place, Slas Are Agreed And Service Delivery Is Maintained
During The Transition Supporting The Development Of Ramp-Up Plans And Building
Of Profiles On Basis Of Service Line Demands Managing And Resolving Escalations
That Have Impact On Critical Path Of Service Delivery Taking Regular Feedback
From Client Service Teams On Services Delivered From Icoe Reviewing Performance
Of Icoe Against Agreed Kpis And Their Compliance To Slas And Reverse Slas At
Regional Leve Promoting A Kpmg Centric And Partnership Approach To Develop
Strong Relationships With Other Working Groups And Ensure Adherence To Group
Governance Monitoring The Reports Being Sent Regarding Icoe Performance
Exceptions Handling And Reporting - Perform Root Cause Analysis For Low Cft
Score Or Sla Non-Compliance And Take Corrective Action Interested Candidates Can
Share Their Their Resume On Reetisingh@Kpmg.Com Salary: Inr 8,00,000 - 9,00,000
Pa. Industry: Other Functional Area: Other Employment Type: Permanent Job, Full
Time', 'Engineering Manager', 'Entry Level', 'Environmental Engineer',
'Executive Sr Executive - Administration', 'Finance Manager', 'Fitness Trainer
Gym Instructor', 'Ford', 'Head   Vp   Gm-Taxation', 'Head Vp Gm Mgr-Online
Digital Marketing', 'Head Vp Gm - Analytics   Bi', 'Head Vp Gm National Manager-
Sales', 'Head Vp Gm-Administration   Facilities', 'Head Vp Gm-Compensation

Benefits', 'Head Vp Gm-Mergers   Acquisitions', 'Head Vp Gm-Quality Assurance Quality Control', 'Head Vp Gm-Training   Development', 'Hod', 'Hotel Seven Seas, An Extraordinary Symbol Of Chic, Opulence And Sophistication, Provides A Signature Experience To Cherish For A Lifetime With Its Classic European Architecture And Avant-Garde Design. Started In 1995, Seven Seas Hospitality Owns And Operates Four Banquet Halls In Delhi And Has Been Recording An Annual Growth Of 20-30 Per Cent Year-On-Year. Located 22 Km From Indira Gandhi International Airport, 16 Km From New Delhi Railway Station And 12 Km From Central Delhi, Hotel Seven Seas Is A Premier Luxury Destination And The Perfect Choice For Business And Social Events. The Property Will Boast Of Total Meeting Space Of 1,00,000 Sq Ft Area, Which Can Accommodate Upto 4000 Guests, 3 Lavish Banquet Halls And Rooms In Size Options From 15000 Sq Ft To 25000 Sq Ft 2 Two Nightclubs, A Shopping Complex Of 6000 Sq Feet, An All-Day Dining Multi Cuisine Restaurant And A Specialty Restaurant Cum Bar. Other Facilities Will Include A Health Club, Steam, Sauna, Jacuzzi And Swimming Pool. The Group Is Also Exploring The Possibility Of Opening Another Hotel, Post The Completion Of This Ambitious Project, In Gurgaon By 2016. However, This Is Still Under Planning Stage. The Brand New Luxury Hotel Seven Seas Has Over 100 Contemporary Designed Well Appointed Rooms. All Our Rooms Come With Luxurious Plush Beddings, Upgraded Bath Amenities; Flat Screen Television, Spacious Work Areas With High Speed Internet Access,', 'Hr Executive', 'Hr Manager', 'Human Resources Manager', 'Insurance Officer', 'Investor Relations Manager', 'It Manager', 'Legal Advisor', 'Llegis Group India Is A Wholly Owned Subsidiary Of Allegis Group, Inc. In India, The Company Specifically Focuses On Dealing With Technology Products And Providing High-End Engineering Design And Analysis, It And Ites Services,Vendor Management, Training And Staffing Services To Fortune 500 Clients. About Allegis Group: A Us $6 Billion World Leader In Staffing Services To Over 4000 Customers Globally   Largest Technology Staffing Company In The World Today. It, Telecom, Infrastructure And Engineering . One Of The Worlds Largest Privately Held Companies. The 6Th Largest Staffing Company In The World And The 2Nd Largest In The Us . One Of The Top Vendors To 99% Of Fortune 500 Companies. Employees Over 100,000 Employees Across Different Parts Of The World. Operations In North America, Europe And Asia With Over 300 Offices And Now In India', 'Logistics Manager', 'Manager', 'Manager   Sr Manager - Administration', 'Manager   Sr Manager - Facility Management', 'Manager - Market Research Consumer Insights   Industry Analysis', 'Marketing Executive', 'Marketing Manager', 'Material Manager', 'Mechanical Engineer', 'Media Manager', 'Medical Director', 'Medical Doctor', 'Medical Transcriptionist', 'Mis Manager', 'Neurologist', 'Operations Manager', 'Orthopaedist', 'Other', 'Outside Consultant', 'Outside Technical Consultant', 'Pay Roll Compensation Manager', 'Pediatrician', 'People Are At The Heart Of Every Successful Business Initiative. At Teksystems, A Leading Provider Of It Staffing And It Services, We Understand People. Every Year We Deploy Over 80,000 It Professionals At 6,000 Client Sites Across North America, Europe And Asia. Our Deep Insights Into The It Labor Market Enable Us To Help Clients Achieve Their Business Goals-While Optimizing Their It Workforce Strategies.', 'Performance Manager', 'Ppc Pay Per Click Lead', 'Ppc Specialist', 'Practice Head   Practice Manager', 'Product Designer', 'Product Development Executive', 'Product Manager', 'Production

Manager', 'Professor', 'Program Manager', 'Project Manager', 'Project Manager-It Software', 'Project Manager-Production Manufacturing Maintenance', 'Project Manager-Telecom', 'Public Relations Manager', 'Purchase Executive', 'Purchase Officer', 'Purchase Vendor Development Manager', 'Purchasing Manager', 'Quality Assurance   Quality Control-Manager', 'Quality Assurance Manager', 'R D Executive', 'R&D Manager', 'Radiologist', 'Recruitment Executive', 'Recruitment Manager', 'Regional Manager', 'Regulatory Affairs Manager', 'Relationship Executive', 'Release Manager', 'Research Manager', 'Research Scientist', 'Restaurant Manager', 'Retail Manager', 'Rf System Designer', 'Rfi   Rfp Manager', 'Risk Manager', 'Safety Manager', 'Sales Business Development Manager', 'Sales Head', 'Sales Manager', 'Sales Representative', 'Sales Trainer', 'Search Engine Optimisation Seo Lead', 'Search Engine Optimisation Seo Specialist', 'Senior Consultant', 'Senior Design Engineer', 'Service Delivery Leader', 'Service Manager', 'Soft Skill Trainer', 'Software Developer', 'Solution Architect', 'Staff Function', 'Staffing Specialist Manpower Planning', 'Store Keeper Warehouse Assistant', 'Strategic Manager', 'Subject Matter Expert', 'Surgeon', 'System Administrator', 'System Analyst', 'System Integration Technician', 'System Security', 'Taxation(Direct) Manager', 'Taxation(Indirect) Manager', 'Teacher', 'Team Leader', 'Team Leader-Quality Assurance Quality Control', 'Technical   Process Trainer', 'Technical Architect', 'Technical Lead', 'Technical Support', 'Technical Support Manager', 'Technology Manager', 'Teksystems Global Services (Tgs) Is The Software Services Division Of Teksystems. Teksystems Is A $4.3 Billion Organization With Over 150 Offices Across The Globe. Tgs Accounts For $600 Million And Has About 5000 Full Time Employees Across The Globe Of Which 1200 Are In India. Tgs Operates Through Multiple Solution Centers Across Locations Like Us (Dallas, Redmond, Bloomington, Baltimore, Maryland), Europe (Amsterdam, London), Canada, Manila And India (Bangalore And Hyderabad). We Are An Iso 27001 Certified Organization', 'Telecaller', 'Testing Engineer', 'Textile Designer', 'The Glove', 'Tour Management Manager Senior Manager', 'Trainer Faculty', 'Training Manager', 'Transition Manager', 'Transitions Migrations Manager', 'Transport Distribution Manager', 'Travel Agent', 'Treasury Manager', 'Underwriting Manager', 'Unisys Is A Worldwide Information Technology Company. We Provide A Portfolio Of It Services, Software, And Technology That Solves Critical Problems For Clients. We Specialize In Helping Clients Secure Their Operations, Increase The Efficiency And Utilization Of Their Data Centers, Enhance Support To Their End Users And Constituents, And Modernize Their Enterprise Applications. To Provide These Services And Solutions, We Bring Together Offerings And Capabilities In Outsourcing Services, Systems Integration And Consulting Services, Infrastructure Services, Maintenance Services, And High-End Server Technology. Unisys India Was Established In 2004 In Bangalore. We Have Strengthened Tremendously In Terms Of Headcount And Infrastructure, As Well As Capabilities To Become An Integral Part Of The Unisys Global Delivery Organization. Today, We Have Three State-Of-The-Art Facilities - Two In Bangalore And One In Hyderabad. At Unisys India You Will See A Representation From Most Functions Of Unisys. Be It Product Development For Systems Technology, Application Design And Migration For Global Industries, Service Desk Enterprise Computing   Itil Processes   Field Operations Back Office For Gois Or

Extensions Of Various Unisys Corporate Functions. We Are Here Today Because Of Our Relentless Efforts Towards Timely, Quality And Cost Efficient Deliveries, All Meant To Drive A High Level Of Customer Satisfaction At A Compelling Cost. A Unique Blend Of Mature Processes, High Focus On Tools And, Above All A Team Of Highly Talented And Motivated Employees Play A Critical Role In Making This Possible. We Are Poised To Play An Increasingly Important Role In Unisys Journey Towards Predictable And Profitable Growth. You Could Be A Part Of This Change. Imagine It. Done. For More Information, Visit Http: Www.Unisys.Com', 'Visualiser', 'Voice   Accent Trainer', 'Warehouse Manager', 'Web Developer', 'Writer']

[113]:
```python
# Mapping for job title consolidation
title_mapping = {
    # Existing mappings
    'Business Analyst': 'Business Analyst',
    'Financial Analyst': 'Business Analyst',
    'Sales Executive': 'Sales Manager',
    'Sales Officer': 'Sales Manager',
    'Area Sales Manager': 'Sales Manager',
    'Sales Coordinator': 'Sales Manager',
    'Project Manager': 'Project Manager',
    'Project Lead': 'Project Manager',
    'Associate Senior Associate': 'Project Manager',
    'Project Architect': 'Project Manager',
    'Technical Support Engineer': 'Technical Support Manager',
    'Technical Support Manager': 'Technical Support Manager',
    'Software Developer': 'Software Developer',
    'Software Engineer': 'Software Developer',
    'Quality Assurance Executive': 'Quality Assurance Manager',
    'Quality Control Manager': 'Quality Assurance Manager',
    'Social Media Marketing Manager': 'Marketing Manager',
    'Marketing Manager': 'Marketing Manager',
    'Sales': 'Marketing Manager',
    'Direct Marketing Executive': 'Marketing Manager',
    'HR Executive': 'Human Resources Manager',
    'HR Manager': 'Human Resources Manager',
    'Recruitment Manager': 'Human Resources Manager',
    'Graphic Designer': 'Creative Director',
    'User Experience Designer': 'Creative Director',
    'Copywriter': 'Creative Director',
    'Logistics Executive': 'Logistics Manager',
    'Logistics Manager': 'Logistics Manager',
    'Operations Manager': 'Operations Manager',
    'Facility Management Manager': 'Operations Manager',
    'Trainee': 'Training Manager',
    'Teacher': 'Training Manager',
    'Trainer': 'Training Manager',
```

```python
    'Training Manager': 'Training Manager',
    'Soft Skills Trainer': 'Training Manager',
    'Research Scientist': 'Research Manager',
    'Clinical Research Manager': 'Research Manager',
    'Client Servicing Executive': 'Client Relationship Manager',
    'Client Relationship Manager': 'Client Relationship Manager',

    # New mappings based on the provided titles
    'Accessory Designer': 'Creative Director',  # new marking
    'Accountant': 'Accountant',  # new marking
    'Accounts Executive': 'Accounts Manager',  # new marking
    'Accounts Manager': 'Accounts Manager',  # new marking
    'Actuary Manager': 'Finance Manager',  # new marking
    'Analyst': 'Data Analyst',  # new marking
    'Analytics Manager': 'Data Analyst',  # new marking
    'Animation Designer': 'Creative Director',  # new marking
    'Architect': 'Architect',  # new marking
    'Area Territory Manager': 'Sales Manager',  # new marking
    'Art Director': 'Creative Director',  # new marking
    'Asset Manager': 'Finance Manager',  # new marking
    'Assistant Manager Manager -(Nontechnical)': 'Manager',  # new marking
    'Assistant Manager Manager-(Technical)': 'Manager',  # new marking
    'Assistant Professor': 'Professor',  # new marking
    'Audit Manager': 'Finance Manager',  # new marking
    'Back Office Executive': 'Administrative Assistant',  # new marking
    'Beauty Manager Beautician': 'Beauty Manager',  # new marking
    'Bio-Statistician': 'Data Analyst',  # new marking
    'Branch Manager': 'Operations Manager',  # new marking
    'Broker Trader': 'Finance Manager',  # new marking
    'Business Alliances Manager': 'Business Development Manager',  # new marking
    'Business Development Manager': 'Business Development Manager',  # new␣
↪marking
    'Cabin Crew': 'Customer Service',  # new marking
    'Cardiologist': 'Medical Doctor',  # new marking
    'Chef': 'Culinary Specialist',  # new marking
    'Chief Medical Officer': 'Medical Director',  # new marking
    'Client Servicing Key Account Manager': 'Client Relationship Manager',  #␣
↪new marking
    'Collections Manager': 'Finance Manager',  # new marking
    'Commercial Artist': 'Creative Director',  # new marking
    'Commercial Manager': 'Sales Manager',  # new marking
    'Company Secretary': 'Corporate Secretary',  # new marking
    'Construction-Construction Management': 'Project Manager',  # new marking
    'Content Developer': 'Content Writer',  # new marking
    'Corporate Communication Executive': 'Corporate Communications Manager',  #␣
↪new marking
    'Corporate Planning Strategy Manager': 'Strategic Manager',  # new marking
```

```python
    'Counselor': 'Counselor',  # new marking
    'Credit Analyst-Corporate Banking': 'Finance Manager',  # new marking
    'Credit Control Manager': 'Finance Manager',  # new marking
    'Credit Officer': 'Finance Manager',  # new marking
    'Csr Manager': 'CSR Manager',  # new marking
    'Curriculum Designer': 'Educational Designer',  # new marking
    'Customer Support Engineer': 'Technical Support',  # new marking
    'Database Architect': 'Database Administrator',  # new marking
    'Datawarehousing Technician': 'Data Engineer',  # new marking
    'Dba': 'Database Administrator',  # new marking
    'Dean Director': 'Director',  # new marking
    'Dermatologist': 'Medical Doctor',  # new marking
    'Design Engineer': 'Engineering Manager',  # new marking
    'Electrical Engineer-Industrial': 'Electrical Engineer',  # new marking
    'Electrical Engineer-Utility': 'Electrical Engineer',  # new marking
    'Engineering Manager': 'Engineering Manager',  # new marking
    'Environment Engineer Officer': 'Environmental Engineer',  # new marking
    'Equity Analyst': 'Finance Manager',  # new marking
    'Erp Consultant': 'Consultant',  # new marking
    'Events Promotion Executive': 'Marketing Executive',  # new marking
    'Events Promotion Manager': 'Marketing Manager',  # new marking
    'Executive Sr Executive - Administration': 'Administrative Executive',  #␣
↪new marking
    'Factory Head': 'Operations Manager',  # new marking
    'Finance Executive': 'Finance Manager',  # new marking
    'Finance Manager': 'Finance Manager',  # new marking
    'Financial Controller': 'Finance Manager',  # new marking
    'Fitness Trainer Gym Instructor': 'Fitness Trainer',  # new marking
    'Foreman': 'Operations Manager',  # new marking
    'Forex Dealer': 'Finance Manager',  # new marking
    'Formulation Scientist': 'Research Scientist',  # new marking
    'Fresher': 'Entry Level',  # new marking
    'Front Office Guest Relations Executive Manager': 'Customer Service␣
↪Manager',  # new marking
    'Functional Outside Consultant': 'Consultant',  # new marking
    'Fund Manager-Equity': 'Finance Manager',  # new marking
    'General Manager': 'Operations Manager',  # new marking
    'General Practitioner': 'Medical Doctor',  # new marking
    'Gynaeocologist': 'Medical Doctor',  # new marking
    'Hardware Design Engineer': 'Engineering Manager',  # new marking
    'Head Manager Gm-Media Planning': 'Media Manager',  # new marking
    'Head Vp Gm - Analytics Bi': 'Data Analytics Manager',  # new marking
    'Head Vp Gm Mgr-Online Digital Marketing': 'Digital Marketing Manager',  #␣
↪new marking
    'Head Vp Gm National Manager -Sales': 'Sales Manager',  # new marking
    'Head Vp Gm-Accounts': 'Finance Manager',  # new marking
    'Head Vp Gm-Administration Facilities': 'Operations Manager',  # new marking
```

```python
    'Head Vp Gm-Broking': 'Broker Manager',  # new marking
    'Head Vp Gm-Client Servicing': 'Client Relationship Manager',  # new marking
    'Head Vp Gm-Commercial': 'Commercial Manager',  # new marking
    'Head Vp Gm-Compensation Benefits': 'HR Manager',  # new marking
    'Head Vp Gm-Corporate Advisory': 'Corporate Advisor',  # new marking
    'Head Vp Gm-Corporate Planning Strategy': 'Strategic Manager',  # new␣
↪marking
    'Head Vp Gm-Credit Risk': 'Risk Manager',  # new marking
    'Head Vp Gm-Finance Audit': 'Finance Manager',  # new marking
    'Head Vp Gm-Hr': 'HR Manager',  # new marking
    'Head Vp Gm-Investment Banking': 'Finance Manager',  # new marking
    'Head Vp Gm-Marketing': 'Marketing Manager',  # new marking
    'Head Vp Gm-Mergers Acquisitions': 'M&A Manager',  # new marking
    'Head Vp Gm-Operations': 'Operations Manager',  # new marking
    'Head Vp Gm-Production Manufacturing Maintenance': 'Production Manager',  #␣
↪new marking
    'Head Vp Gm-Purchase Material Management': 'Purchasing Manager',  # new␣
↪marking
    'Head Vp Gm-Quality Assurance Quality Control': 'Quality Assurance␣
↪Manager',  # new marking
    'Head Vp Gm-R D': 'R&D Manager',  # new marking
    'Head Vp Gm-Recruitment': 'Recruitment Manager',  # new marking
    'Head Vp Gm-Regulatory Affairs': 'Regulatory Affairs Manager',  # new␣
↪marking
    'Head Vp Gm-Sales': 'Sales Manager',  # new marking
    'Head Vp Gm-Strategy Corporate Development': 'Corporate Development␣
↪Manager',  # new marking
    'Head Vp Gm-Training': 'Training Manager',  # new marking
    'Head Vp Gm-User Experience Design': 'UX Manager',  # new marking
    'Head Vp Gm-Vp': 'VP',  # new marking
    'Help Desk Executive': 'Technical Support',  # new marking
    'Help Desk Manager': 'Technical Support Manager',  # new marking
    'Housekeeping Supervisor': 'Facilities Manager',  # new marking
    'Hse Manager': 'HSE Manager',  # new marking
    'Hr Executive': 'HR Executive',  # new marking
    'Hr Generalist': 'HR Manager',  # new marking
    'Human Resource Executive': 'HR Executive',  # new marking
    'IT Head': 'IT Manager',  # new marking
    'IT Manager': 'IT Manager',  # new marking
    'IT Officer': 'IT Support',  # new marking
    'IT Support Engineer': 'Technical Support',  # new marking
    'IT Support Officer': 'Technical Support',  # new marking
    'Lead Manager': 'Lead',  # new marking
    'Logistics Executive': 'Logistics Manager',  # new marking
    'Logistics Supervisor': 'Logistics Manager',  # new marking
    'Maintenance Manager': 'Maintenance Manager',  # new marking
```

```python
    'Market Research Manager': 'Marketing Manager',  # new marking
    'Marketing Communication Manager': 'Marketing Manager',  # new marking
    'Marketing Executive': 'Marketing Executive',  # new marking
    'Marketing Manager': 'Marketing Manager',  # new marking
    'Medical Director': 'Medical Director',  # new marking
    'Medical Officer': 'Medical Officer',  # new marking
    'Medical Representative': 'Medical Sales Representative',  # new marking
    'Medical Sales Executive': 'Medical Sales Executive',  # new marking
    'Operations Executive': 'Operations Executive',  # new marking
    'Operations Manager': 'Operations Manager',  # new marking
    'Operations Supervisor': 'Operations Supervisor',  # new marking
    'Partner': 'Partner',  # new marking
    'Php Developer': 'Software Developer',  # new marking
    'Physician': 'Medical Doctor',  # new marking
    'Product Executive': 'Product Manager',  # new marking
    'Production Engineer': 'Production Engineer',  # new marking
    'Production Manager': 'Production Manager',  # new marking
    'Project Associate': 'Project Manager',  # new marking
    'Project Coordinator': 'Project Coordinator',  # new marking
    'Project Lead': 'Project Manager',  # new marking
    'Project Manager': 'Project Manager',  # new marking
    'Project Supervisor': 'Project Manager',  # new marking
    'Quality Assurance Executive': 'Quality Assurance Manager',  # new marking
    'Quality Control Engineer': 'Quality Control Manager',  # new marking
    'Research Analyst': 'Research Analyst',  # new marking
    'Research Assistant': 'Research Assistant',  # new marking
    'Research Scientist': 'Research Scientist',  # new marking
    'Researcher': 'Researcher',  # new marking
    'Sales Executive': 'Sales Manager',  # new marking
    'Sales Officer': 'Sales Manager',  # new marking
    'Sales Manager': 'Sales Manager',  # new marking
    'Software Developer': 'Software Developer',  # new marking
    'Software Engineer': 'Software Developer',  # new marking
    'Strategic Planner': 'Strategic Manager',  # new marking
    'Technical Support Engineer': 'Technical Support Manager',  # new marking
    'Technical Support Manager': 'Technical Support Manager',  # new marking
    'Web Developer': 'Software Developer',  # new marking
}

# Apply the mapping function
merged_data['job_title'] = merged_data['job_title'].apply(map_job_title)

# Title case the job titles
merged_data['job_title'] = merged_data['job_title'].str.title()

# Print unique job titles
print(sorted(merged_data['job_title'].unique()))
```

['" Deeper Understanding Of Transfer Pricing As A Concept And Provisions Of Tp Law (Definition Of Ae, Methods Etc.) In India. Basic Understanding Of Other Direct Tax Concepts And Other Allied Laws. Good Communication Skills Oral As Well As Written Knowing Business English Is Very Important. Understanding Of The Clients Business And The Issues Involved. Personal Ownership For Own Work And Performance Ability To Understand The Issues And Discuss The Same With Senior Colleagues In A Proper Way To Keep Updated With Case Laws And Assist Senior Colleagues In Application Of The Ratio Of The Judgements In The Assignments Handled Personal Ownership (Responsibility And Accountability) For The Work And Performance Ability To Learn New Skills, Share Knowledge And Experience To Support Senior Colleague In The Assignments In A Fruitful Manner To Ensure That The Risk And Other Policies Are Being Adhered To " Experience Is Tp Is Mandatory. Interested Candidates Can Share Their Resume On Reetisingh@Gmail.Com Or Can Call At 8355949358. Salary: Inr 6,00,000 - 9,00,000 Pa. Industry: Other Functional Area: Other Employment Type: Permanent Job, Full Time', 'About Teksystems:* Teksystems Provides Global It Professional Recruitment Services To Help Organizations Achieve Their It And Business Goals.*We Provide Service Across Applications, End User Support, It Leadership, Networks Infrastructure, Project   Pmo*$3.8 Billion World Leader In Technology Staffing Services*Wholly Owned Subsidiary Of Allegis Group, A $11 Billion Enterprise*6,000+ Clients, With 98% Client Retention*Over 100 Locations Throughout North America, Europe And Asia*5,000 Full Time Employees*Over 80,000 It Consultants Deployed Worldwide Annually*#1 Us Provider Of It Recruitment*Best Of Staffing Client Satisfaction And Candidate Satisfaction By Inavero *Forbes America\'S Best Employers List *We Have Been Listed In Fortune Magazine Under "100 Best Companies To Work For" For 5 Consecutive Years*Please Visit - Www.Teksystems.Com ; Www.Allegisgroup.Com, For More Information On Us.', 'Accenture (Nyse: Acn) Is A Leading Global Professional Services Company, Providing A Broad Range Of Services And Solutions In Strategy, Consulting, Digital, Technology And Operations. Combining Unmatched Experience And Specialized Skills Across More Than 40 Industries And All Business Functions Underpinned By The Worlds Largest Delivery Network- Accenture Works At The Intersection Of Business And Technology To Help Clients Improve Their Performance And Create Sustainable Value For Their Stakeholders. With Approximately 477,000 People Serving Clients In More Than 120 Countries, Accenture Drives Innovation To Improve The Way The World Works And Lives. Important Notice We Have Been Alerted To The Existence Of Fraudulent Messages Asking Job Seekers To Set Up Payment To Cover Various Costs Associated With Establishing Employment At Accenture. No One Is Ever Required To Pay For Employment At Accenture. If You Are Contacted By Someone Asking For Payment, Please Do Not Respond, And Contact Us At India.Fc.Check@Accenture.Com Immediately.', 'Accountant', 'Accounts Manager', 'Administrative Assistant', "Allegis Group India Is A Wholly Owned Subsidiary Of Allegis Group, Inc. In India, The Company Specifically Focuses On Dealing With Technology Products And Providing High-End Engineering Design And Analysis, It And Ites Services,Vendor Management, Training And Staffing Services To Fortune 500 Clients. About Allegis Group: A Us $6Billion World Leader In Staffing Services To Over 4000 Customers Globally World'S Largest Technology Staffing Company In The World Today It, Telecom, Infrastructure And Engineering One Of The World'S Largest Privately

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Manager-Telecom', 'Public Relations Manager', 'Purchase Executive', 'Purchase
Officer', 'Purchase Vendor Development Manager', 'Purchasing Manager', 'Quality
Assurance Quality Control-Manager', 'Quality Assurance Manager', 'R D
Executive', 'R&D Manager', 'Radiologist', 'Recruitment Executive', 'Regional
Manager', 'Regulatory Affairs Manager', 'Relationship Executive', 'Release
Manager', 'Research Manager', 'Research Scientist', 'Restaurant Manager',
'Retail Manager', 'Rf System Designer', 'Rfi Rfp Manager', 'Risk Manager',
'Safety Manager', 'Sales Business Development Manager', 'Sales Head', 'Sales
Manager', 'Sales Representative', 'Sales Trainer', 'Search Engine Optimisation
Seo Lead', 'Search Engine Optimisation Seo Specialist', 'Senior Consultant',
'Senior Design Engineer', 'Service Delivery Leader', 'Service Manager', 'Soft
Skill Trainer', 'Software Developer', 'Solution Architect', 'Staff Function',
'Staffing Specialist Manpower Planning', 'Store Keeper Warehouse Assistant',
'Strategic Manager', 'Subject Matter Expert', 'Surgeon', 'System Administrator',
'System Analyst', 'System Integration Technician', 'System Security',
'Taxation(Direct) Manager', 'Taxation(Indirect) Manager', 'Team Leader', 'Team
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'Technical Architect', 'Technical Lead', 'Technical Support', 'Technical Support
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Software Services Division Of Teksystems. Teksystems Is A $4.3 Billion
Organization With Over 150 Offices Across The Globe. Tgs Accounts For $600
Million And Has About 5000 Full Time Employees Across The Globe Of Which 1200
Are In India. Tgs Operates Through Multiple Solution Centers Across Locations
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London), Canada, Manila And India (Bangalore And Hyderabad). We Are An Iso 27001
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'Training Manager', 'Transition Manager', 'Transitions Migrations Manager',
'Transport Distribution Manager', 'Travel Agent', 'Treasury Manager',
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Imagine It. Done. For More Information, Visit Http: Www.Unisys.Com',
'Visualiser', 'Voice   Accent Trainer', 'Warehouse Manager', 'Writer']

```python
[114]: merged_data.to_csv('Merged_data2.csv')
```

```python
[115]: merged_data = pd.read_csv('Merged_data2.csv')
```

```python
[116]: import re

# List of meaningless job titles
meaningless_titles = [
    ''' Deeper Understanding Of Transfer Pricing As A Concept And Provisions Of
 Tp Law (Definition Of Ae, Methods Etc.) In India. Basic Understanding Of
 Other Direct Tax Concepts And Other Allied Laws. Good Communication Skills
 Oral As Well As Written Knowing Business English Is Very Important.
 Understanding Of The Clients Business And The Issues Involved. Personal
 Ownership For Own Work And Performance Ability To Understand The Issues And
 Discuss The Same With Senior Colleagues In A Proper Way To Keep Updated With
 Case Laws And Assist Senior Colleagues In Application Of The Ratio Of The
 Judgements In The Assignments Handled Personal Ownership (Responsibility And
 Accountability) For The Work And Performance Ability To Learn New Skills,
 Share Knowledge And Experience To Support Senior Colleague In The
 Assignments In A Fruitful Manner To Ensure That The Risk And Other Policies
 Are Being Adhered To " Experience Is Tp Is Mandatory. Interested Candidates
 Can Share Their Resume On Reetisingh@Gmail.Com Or Can Call At 8355949358.
 Salary: Inr 6,00,000 - 9,00,000 Pa. Industry: Other Functional Area: Other
 Employment Type: Permanent Job, Full Time''',
```

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''' Accenture (Nyse: Acn) Is A Leading Global Professional Services Company, Providing A Broad Range Of Services And Solutions In Strategy, Consulting, Digital, Technology And Operations. Combining Unmatched Experience And Specialized Skills Across More Than 40 Industries And All Business Functions Underpinned By The Worlds Largest Delivery Network- Accenture Works At The Intersection Of Business And Technology To Help Clients Improve Their Performance And Create Sustainable Value For Their Stakeholders. With Approximately 477,000 People Serving Clients In More Than 120 Countries, Accenture Drives Innovation To Improve The Way The World Works And Lives. Important Notice We Have Been Alerted To The Existence Of Fraudulent Messages Asking Job Seekers To Set Up Payment To Cover Various Costs Associated With Establishing Employment At Accenture. No One Is Ever Required To Pay For Employment At Accenture. If You Are Contacted By Someone Asking For Payment, Please Do Not Respond, And Contact Us At India.Fc. Check@Accenture.Com Immediately.''',

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''' Engaging With The Senior Leadership And Middle Management Of The Tax
↪And Advisory Functions In The Region. Working On E-Tds Return, Tax Clearance
↪Preparation, Teq Preparation, Counselling Minutes Notes Preparation, Tax
↪Return, Pan Application And Technical Research. Ensuring Transition Plans
↪And Migration Resources Are In Place, Slas Are Agreed And Service Delivery
↪Is Maintained During The Transition Supporting The Development Of Ramp-Up
↪Plans And Building Of Profiles On Basis Of Service Line Demands Managing And
↪Resolving Escalations That Have Impact On Critical Path Of Service Delivery
↪Taking Regular Feedback From Client Service Teams On Services Delivered From
↪Icoe Reviewing Performance Of Icoe Against Agreed Kpis And Their Compliance
↪To Slas And Reverse Slas At Regional Leve Promoting A Kpmg Centric And
↪Partnership Approach To Develop Strong Relationships With Other Working
↪Groups And Ensure Adherence To Group Governance Monitoring The Reports Being
↪Sent Regarding Icoe Performance Exceptions Handling And Reporting - Perform
↪Root Cause Analysis For Low Cft Score Or Sla Non-Compliance And Take
↪Corrective Action Interested Candidates Can Share Their Their Resume On
↪Reetisingh@Kpmg.Com Salary: Inr 8,00,000 - 9,00,000 Pa. Industry: Other
↪Functional Area: Other Employment Type: Permanent Job, Full Time.''',

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↪Sites Across North America, Europe And Asia. Our Deep Insights Into The It
↪Labor Market Enable Us To Help Clients Achieve Their Business Goals-While
↪Optimizing Their It Workforce Strategies.''',

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↪Experience Across Platforms Through Innovative Solutions. Seeking Candidates
↪Who Are Dynamic, Results-Oriented, And Have A Passion For Technology And
↪Design.''',

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↪Collaborative Environment. Must Have Experience In Developing Scalable
↪Solutions And Enhancing Product Features Based On User Feedback.''',

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↪Possible In The Tech Space. Candidates Should Be Comfortable With Ambiguity
↪And Have A Strong Background In Agile Methodologies.''',

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↪Develop Data-Driven Solutions. The Ideal Candidate Will Have Excellent
↪Analytical Skills And A Proven Track Record Of Driving Business Results.''',

''' Seeking An Individual With Strong Project Management Skills Who Can
↪Drive Efficiency And Foster A Culture Of Continuous Improvement Across All
↪Operations. Previous Experience With Lean Methodologies Is A Plus.''',

''' We Are Committed To Creating An Inclusive Workplace That Values
↪Diversity. Ideal Candidates Should Be Passionate About Social Impact And
↪Have Experience Implementing Sustainable Practices In Business.''',

''' In Search Of A Creative Problem Solver Who Can Transform Challenges
↪Into Opportunities Through Innovative Thinking. The Role Requires Strong
↪Interpersonal Skills And A Commitment To Professional Development.''',

```
        ''' We Value Candidates Who Can Embrace Change And Drive Organizational␣
↪Transformation. Experience With Change Management Frameworks And Stakeholder␣
↪Engagement Is Essential.''',
        ''' Looking For An Energetic Team Player Who Can Collaborate Effectively␣
↪Across Departments To Achieve Strategic Objectives. Must Have Excellent␣
↪Communication Skills And A Results-Driven Mindset.''',
        ''' Join Our Innovative Team And Help Us Build The Future Of Technology.␣
↪The Position Requires A Strong Foundation In Software Development And A␣
↪Passion For Continuous Learning.''',
        ''' Seeking A Detail-Oriented Professional Who Can Manage Complex Projects␣
↪From Inception To Completion. The Role Involves Cross-Departmental␣
↪Coordination And Stakeholder Management.''',
        ''' Looking For A Visionary Leader Who Can Drive Strategic Initiatives And␣
↪Inspire Teams To Achieve Exceptional Results. Experience In Leading␣
↪High-Performance Teams Is Essential.''',
        ''' We Are Searching For A Motivated Individual With A Strong Background In␣
↪Data Analysis And Reporting. Proficiency In Data Visualization Tools Is A␣
↪Plus.''',
        ''' Looking For A Forward-Thinking Professional Who Can Identify Market␣
↪Trends And Develop Strategies To Leverage New Opportunities. Excellent␣
↪Networking Skills Are Important.'''
]


# Clean job titles by stripping whitespace and converting to lowercase
merged_data['job_title'] = merged_data['job_title'].str.strip().str.lower()

# Clean the meaningless_titles by stripping whitespace and converting to␣
 ↪lowercase
meaningless_titles = [title.strip().lower() for title in meaningless_titles]

# Combine all meaningless titles into a single string pattern for partial match
pattern = '|'.join([re.escape(title) for title in meaningless_titles])

# Exclude rows where 'job_title' matches any of the meaningless titles␣
 ↪(case-insensitive)
merged_data = merged_data[~merged_data['job_title'].str.contains(pattern,␣
 ↪case=False, na=False)]

# Capitalize job titles in DataFrame
merged_data['job_title'] = merged_data['job_title'].str.title()

# Print updated dataframe info and unique job titles
print(merged_data.info(), '\n\n')
print(sorted(merged_data['job_title'].unique()))
```

```
<class 'pandas.core.frame.DataFrame'>
Index: 161231 entries, 1 to 161234
```

```
Data columns (total 6 columns):
 #   Column                Non-Null Count   Dtype
---  ------                --------------   -----
 0   Unnamed: 0.1          161231 non-null  int64
 1   Unnamed: 0            161231 non-null  int64
 2   job_title             161231 non-null  object
 3   combined_skills       161231 non-null  object
 4   average_salary_value  161231 non-null  int64
 5   average_experience    161231 non-null  int64
dtypes: int64(4), object(2)
memory usage: 8.6+ MB
None
```

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'Taxation(Direct) Manager', 'Taxation(Indirect) Manager', 'Team Leader', 'Team
Leader-Quality Assurance Quality Control', 'Technical   Process Trainer',
'Technical Architect', 'Technical Lead', 'Technical Support', 'Technical Support
Manager', 'Technology Manager', 'Teksystems Global Services (Tgs) Is The
Software Services Division Of Teksystems. Teksystems Is A $4.3 Billion
Organization With Over 150 Offices Across The Globe. Tgs Accounts For $600
Million And Has About 5000 Full Time Employees Across The Globe Of Which 1200
Are In India. Tgs Operates Through Multiple Solution Centers Across Locations
Like Us (Dallas, Redmond, Bloomington, Baltimore, Maryland), Europe (Amsterdam,
London), Canada, Manila And India (Bangalore And Hyderabad). We Are An Iso 27001
Certified Organization', 'Telecaller', 'Testing Engineer', 'Textile Designer',
'The Glove', 'Tour Management Manager Senior Manager', 'Trainer Faculty',
'Training Manager', 'Transition Manager', 'Transitions Migrations Manager',
'Transport Distribution Manager', 'Travel Agent', 'Treasury Manager',
'Underwriting Manager', 'Unisys Is A Worldwide Information Technology Company.
We Provide A Portfolio Of It Services, Software, And Technology That Solves
Critical Problems For Clients. We Specialize In Helping Clients Secure Their
Operations, Increase The Efficiency And Utilization Of Their Data Centers,
Enhance Support To Their End Users And Constituents, And Modernize Their
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Together Offerings And Capabilities In Outsourcing Services, Systems Integration
And Consulting Services, Infrastructure Services, Maintenance Services, And
High-End Server Technology. Unisys India Was Established In 2004 In Bangalore.
We Have Strengthened Tremendously In Terms Of Headcount And Infrastructure, As
Well As Capabilities To Become An Integral Part Of The Unisys Global Delivery
Organization. Today, We Have Three State-Of-The-Art Facilities - Two In
Bangalore And One In Hyderabad. At Unisys India You Will See A Representation
From Most Functions Of Unisys. Be It Product Development For Systems
Technology, Application Design And Migration For Global Industries, Service Desk
Enterprise Computing   Itil Processes   Field Operations Back Office For Gois Or
Extensions Of Various Unisys Corporate Functions. We Are Here Today Because Of
Our Relentless Efforts Towards Timely, Quality And Cost Efficient Deliveries,
All Meant To Drive A High Level Of Customer Satisfaction At A Compelling Cost. A
Unique Blend Of Mature Processes, High Focus On Tools And, Above All A Team Of
Highly Talented And Motivated Employees Play A Critical Role In Making This
Possible. We Are Poised To Play An Increasingly Important Role In Unisys Journey
Towards Predictable And Profitable Growth. You Could Be A Part Of This Change.
Imagine It. Done. For More Information, Visit Http: Www.Unisys.Com',
'Visualiser', 'Voice   Accent Trainer', 'Warehouse Manager', 'Writer']

[117]: merged_data.head()

[117]:   Unnamed: 0.1 Unnamed: 0 \
     1   1   116
     3   3   147
     4   4   254
     5   5   321

```
      6          6          334

                                                 job_title  \
1   About Teksystems:* Teksystems Provides Global …
3                                     Creative Director
4                                      Accounts Manager
5                                      Accounts Manager
6                                      Accounts Manager


                                 combined_skills  average_salary_value  \
1  ['Marketing Automation', 'General Skills', 'SQ…                225000
3  ['General Skills', ' Home Decor', ' bags', ' c…                266666
4  [' Internal Audit', ' SOX', 'General Skills', …                183333
5       [' Accounting Operations', 'General Skills']             416666
6  [' balance sheet', ' esi', ' finance', 'Genera…                166666


   average_experience
1                   0
3                   0
4                   0
5                   0
6                   0
```

```python
[118]: merged_data = merged_data.drop(['Unnamed: 0','Unnamed: 0.1'], axis = 1)
```

```python
[119]: merged_data.to_csv("C:/Users/Manas/OneDrive/Documents/TYDS Final Year Project/
       ↪TYDS Project Data/Merged_data2.csv", index = False)
```

13 Final Dataset

```python
[120]: import pandas as pd
       import numpy as np
       import matplotlib.pyplot as plt
       import seaborn as sns
       import math
       import warnings
       warnings.filterwarnings("ignore")
       import re
```

```python
[121]: merged_data = pd.read_csv('Merged_data2.csv')
```

```python
[122]: merged_data
```

```
[122]:                                                 job_title  \
       0       About Teksystems:* Teksystems Provides Global …
       1                                     Creative Director
```

```
2                                               Accounts Manager
3                                               Accounts Manager
4                                               Accounts Manager
...                                                          ...
161226                                        Software Developer
161227                                        Software Developer
161228                                        Software Developer
161229                                        Operations Manager
161230  Llegis Group India Is A Wholly Owned Subsidiar…

                                                combined_skills  \
0          ['Marketing Automation', 'General Skills', 'SQ…
1          ['General Skills', ' Home Decor', ' bags', ' c…
2          [' Internal Audit', ' SOX', 'General Skills', …
3                  [' Accounting Operations', 'General Skills']
4          [' balance sheet', ' esi', ' finance', 'Genera…
...                                                          ...
161226     [' web designing', ' css', ' flash', 'General …
161227     [' web designer', ' web designing', ' website …
161228     [' Team Building', 'General Skills', ' Web Pro…
161229     [' Forklift', 'General Skills', ' Crane Operat…
161230     ['Windows Server Administration', 'Operating S…

        average_salary_value  average_experience
0                     225000                   0
1                     266666                   0
2                     183333                   0
3                     416666                   0
4                     166666                   0
...                      ...                 ...
161226                166666                   0
161227                191666                   0
161228                162500                   0
161229                275000                   0
161230                216666                   0

[161231 rows x 4 columns]
```

[123]: `merged_data.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 161231 entries, 0 to 161230
Data columns (total 4 columns):
 #   Column            Non-Null Count   Dtype
---  ------            --------------   -----
 0   job_title         161231 non-null  object
 1   combined_skills   161231 non-null  object
```

```
 2   average_salary_value  161231 non-null  int64
 3   average_experience    161231 non-null  int64
dtypes: int64(2), object(2)
memory usage: 4.9+ MB
```

[124]: `merged_data['job_title'].nunique()`

[124]: 188

[125]: `merged_data['combined_skills'].nunique()`

[125]: 2902

[ ]:

14   Machine Learning Models

Random Forest

[202]:
```python
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.ensemble import RandomForestClassifier
import warnings
warnings.filterwarnings("ignore")


data=pd.read_csv("Merged_data2.csv")

df = pd.DataFrame(data)
X = df[['combined_skills', 'average_salary_value', 'average_experience']]
y = df['job_title']

X['combined_skills'] = X['combined_skills'].apply(lambda x: ' '.join(x))
X = pd.concat([X.drop('combined_skills', axis=1), X['combined_skills'].str.
 ↪get_dummies(sep=' ')], axis=1)

X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3,
 ↪random_state=42)



model = RandomForestClassifier()
model.fit(X_train, y_train)

accuracy = model.score(X_test, y_test)
print('Accuracy:', accuracy*100)
```

```
Accuracy: 99.06284910422441
```

14.1   Random Forest in Standardised Scale

```python
[203]: from sklearn.preprocessing import StandardScaler

       df = pd.DataFrame(data)

       df['skill_count'] = df['combined_skills'].apply(len)

       scaler = StandardScaler()
       df['salary_normalized'] = scaler.fit_transform(df[['average_salary_value']])

       X = df[['combined_skills', 'salary_normalized',␣
        ↪'average_experience','skill_count']]
       y = df['job_title']

       X['combined_skills'] = X['combined_skills'].apply(lambda x: ' '.join(x))
       X = pd.concat([X.drop('combined_skills', axis=1), X['combined_skills'].str.
        ↪get_dummies(sep=' ')], axis=1)

       X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2,␣
        ↪random_state=42)


       model = RandomForestClassifier()
       model.fit(X_train, y_train)

       accuracy = model.score(X_test, y_test)
       print('Accuracy:', accuracy*100)
```

```
Accuracy: 99.03491078355314
```

14.2   Decision Tree

```python
[204]: import pandas as pd
       from sklearn.model_selection import train_test_split
       from sklearn.ensemble import RandomForestClassifier
       from sklearn.preprocessing import OneHotEncoder
       from sklearn.preprocessing import StandardScaler
       import warnings
       warnings.filterwarnings("ignore")

       data=pd.read_csv("Merged_data2.csv")

       df = pd.DataFrame(data)

       df['skill_count'] = df['combined_skills'].apply(len)

       scaler = StandardScaler()
```

```python
df['salary_normalized'] = scaler.fit_transform(df[['average_salary_value']])

X = df[['combined_skills', 'salary_normalized',
 'average_experience','skill_count']]
y = df['job_title']

X['combined_skills'] = X['combined_skills'].apply(lambda x: ' '.join(x))
X = pd.concat([X.drop('combined_skills', axis=1), X['combined_skills'].str.
 get_dummies(sep=' ')], axis=1)

X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2,
 random_state=42)
model = RandomForestClassifier()
model.fit(X_train, y_train)

accuracy = model.score(X_test, y_test)
print('Accuracy:', accuracy*100)
```

Accuracy: 99.0411171450737

```
[164]: import pandas as pd
       data = pd.read_csv("Merged_data2.csv")
       data.head()
```

```
[164]:                                            job_title  \
       0  About Teksystems:* Teksystems Provides Global …
       1                                 Creative Director
       2                                  Accounts Manager
       3                                  Accounts Manager
       4                                  Accounts Manager

                                     combined_skills  average_salary_value  \
       0  ['Marketing Automation', 'General Skills', 'SQ…                225000
       1  ['General Skills', ' Home Decor', ' bags', ' c…                266666
       2  [' Internal Audit', ' SOX', 'General Skills', …                183333
       3      [' Accounting Operations', 'General Skills']                416666
       4  [' balance sheet', ' esi', ' finance', 'Genera…                166666

          average_experience
       0                   0
       1                   0
       2                   0
       3                   0
       4                   0
```

```
[165]: data['combined_skills'].nunique()
```

[165]: 2902

[166]: ```
data['job_title'].nunique()
```

[166]: 188

[167]: ```
data['job_title'].unique()
```

[167]: array(['About Teksystems:* Teksystems Provides Global It Professional
       Recruitment Services To Help Organizations Achieve Their It And Business
       Goals.*We Provide Service Across Applications, End User Support, It Leadership,
       Networks Infrastructure, Project   Pmo*$3.8 Billion World Leader In Technology
       Staffing Services*Wholly Owned Subsidiary Of Allegis Group, A $11 Billion
       Enterprise*6,000+ Clients, With 98% Client Retention*Over 100 Locations
       Throughout North America, Europe And Asia*5,000 Full Time Employees*Over 80,000
       It Consultants Deployed Worldwide Annually*#1 Us Provider Of It Recruitment*Best
       Of Staffing Client Satisfaction And Candidate Satisfaction By Inavero *Forbes
       America\'S Best Employers List *We Have Been Listed In Fortune Magazine Under
       "100 Best Companies To Work For" For 5 Consecutive Years*Please Visit -
       Www.Teksystems.Com ; Www.Allegisgroup.Com, For More Information On Us.',
             'Creative Director', 'Accounts Manager', 'Finance Manager',
             'Marketing Manager',
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       And Providing High-End Engineering Design And Analysis, It And Ites
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       To Over 4000 Customers Globally World'S Largest Technology Staffing Company In
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       Company In The World And The 2Nd Largest In The Us One Of The Top Vendors To 99%
       Of Fortune 500 Companies Employs Over 100,000 Employees Across Different Parts
       Of The World Operations In North America, Europe And Asia With Over 300 Offices
       And Now In India",
             "Allegis Group India Is A Wholly Owned Subsidiary Of Allegis Group, Inc.
       In India, The Company Specifically Focuses On Dealing With Technology Products
       And Providing High-End Engineering Design And Analysis, It And Ites
       Services,Vendor Management, Training And Staffing Services To Fortune 500
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       Over 4000 Customers Globally World'S Largest Technology Staffing Company In The
       World Today It, Telecom, Infrastructure And Engineering Brone Of The World'S
       Largest Privately Held Companies (Source: Forbes) The 6Th Largest Staffing
       Company In The World And The 2Nd Largest In The Us One Of The Top Vendors To 99%
       Of Fortune 500 Companies Employs Over 100,000 Employees Across Different Parts
       Of The World Operations In North America, Europe And Asia With Over 300 Offices
       And Now In India",
             'Anaesthetist', 'Data Analyst',

'Analytical Chemistry Associate Scientist',
'Apparel Garment Designer', 'Architect',
'Area   Territory Manager', 'Sales Manager', 'Manager',
'Assistant Manager Manager-(Nontechnical)', 'Professor',
'Project Manager', 'Administrative Assistant',
'Beauty Manager   Beautician', 'Research Manager',
'Training Manager', 'Operations Manager', 'Regional Manager',
'Business Development Manager', 'Business Analyst', 'Cio',
'Csr Manager', 'Customer Service', 'Medical Doctor',
'Cards-Operations Manager', 'Accountant', 'Medical Director',
'Client Relationship Manager', 'Corporate Secretary',
'Construction-General Building', 'Construction-Heavy',
'Construction-Residential', 'Construction-Specialty',
'Content Writer', 'Corporate Communications Manager',
'Strategic Manager',
'Correspondent Assistant Editor Associate Editor', 'Counselor',
'Credit Control Executive', 'Educational Designer',
'Technical Support', 'Database Administrator', 'Data Engineer',
'Data Scientist', 'Dean   Director', 'Engineering Manager',
'Design Manager', 'Documentation Medical Writing',
'Documentation Shipping-Executive Manager', 'Consultant',
'Electrical Engineer',
'Engaging With The Senior Leadership And Middle Management Of The Tax And
Advisory Functions In The Region. Working On E-Tds Return, Tax Clearance
Preparation, Teq Preparation, Counselling Minutes Notes Preparation, Tax Return,
Pan Application And Technical Research. Ensuring Transition Plans And Migration
Resources Are In Place, Slas Are Agreed And Service Delivery Is Maintained
During The Transition Supporting The Development Of Ramp-Up Plans And Building
Of Profiles On Basis Of Service Line Demands Managing And Resolving Escalations
That Have Impact On Critical Path Of Service Delivery Taking Regular Feedback
From Client Service Teams On Services Delivered From Icoe Reviewing Performance
Of Icoe Against Agreed Kpis And Their Compliance To Slas And Reverse Slas At
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Governance Monitoring The Reports Being Sent Regarding Icoe Performance
Exceptions Handling And Reporting - Perform Root Cause Analysis For Low Cft
Score Or Sla Non-Compliance And Take Corrective Action Interested Candidates Can
Share Their Their Resume On Reetisingh@Kpmg.Com Salary: Inr 8,00,000 - 9,00,000
Pa. Industry: Other Functional Area: Other Employment Type: Permanent Job, Full
Time',
'Environmental Engineer', 'Marketing Executive',
'Culinary Specialist', 'Executive Sr Executive - Administration',
'Fitness Trainer   Gym Instructor', 'Ford', 'Research Scientist',
'Entry Level', 'Customer Service Manager', 'Sales Head',
'Software Developer', 'Hod', 'Hr Manager', 'Hr Executive',
'Head   Vp   Gm-Taxation', 'Media Manager',
'Head Vp Gm - Analytics   Bi',

'Head Vp Gm-Administration   Facilities', 'Broker Manager',
'Head Vp Gm-Compensation   Benefits', 'Corporate Advisor',
'Risk Manager', 'Head Vp Gm-Mergers   Acquisitions',
'Production Manager', 'Purchasing Manager',
'Head Vp Gm-Quality Assurance   Quality Control', 'R&D Manager',
'Human Resources Manager', 'Regulatory Affairs Manager',
'Logistics Manager', 'Cto', 'Head Vp Gm-Training   Development',
'Transition Manager', 'Underwriting Manager',
'Head Vp Gm Mgr-Online Digital Marketing',
'Head Vp Gm National Manager-Sales',
'Hotel Seven Seas, An Extraordinary Symbol Of Chic, Opulence And
Sophistication, Provides A Signature Experience To Cherish For A Lifetime With
Its Classic European Architecture And Avant-Garde Design. Started In 1995, Seven
Seas Hospitality Owns And Operates Four Banquet Halls In Delhi And Has Been
Recording An Annual Growth Of 20-30 Per Cent Year-On-Year. Located 22 Km From
Indira Gandhi International Airport, 16 Km From New Delhi Railway Station And 12
Km From Central Delhi, Hotel Seven Seas Is A Premier Luxury Destination And The
Perfect Choice For Business And Social Events. The Property Will Boast Of Total
Meeting Space Of 1,00,000 Sq Ft Area, Which Can Accommodate Upto 4000 Guests, 3
Lavish Banquet Halls And Rooms In Size Options From 15000 Sq Ft To 25000 Sq Ft 2
Two Nightclubs, A Shopping Complex Of 6000 Sq Feet, An All-Day Dining Multi
Cuisine Restaurant And A Specialty Restaurant Cum Bar. Other Facilities Will
Include A Health Club, Steam, Sauna, Jacuzzi And Swimming Pool. The Group Is
Also Exploring The Possibility Of Opening Another Hotel, Post The Completion Of
This Ambitious Project, In Gurgaon By 2016. However, This Is Still Under
Planning Stage. The Brand New Luxury Hotel Seven Seas Has Over 100 Contemporary
Designed Well Appointed Rooms. All Our Rooms Come With Luxurious Plush Beddings,
Upgraded Bath Amenities; Flat Screen Television, Spacious Work Areas With High
Speed Internet Access,',
'It Manager', 'Technology Manager',
'Sales Business Development Manager', 'Insurance Officer',
'Designer', 'Investor Relations Manager', 'Writer',
'Legal Advisor', 'Mis Manager',
'Manager - Market Research   Consumer Insights   Industry Analysis',
'Manager   Sr Manager - Administration',
'Manager   Sr Manager - Facility Management', 'Material Manager',
'Mechanical Engineer', 'Sales Representative',
'Medical Transcriptionist', 'Director', 'Neurologist',
'Orthopaedist', 'Other', 'Outside Consultant',
'Outside Technical Consultant', 'Ppc Pay Per Click Lead',
'Ppc Specialist', 'Pay Roll Compensation Manager', 'Pediatrician',
'Performance Manager', 'Practice Head   Practice Manager',
'Product Designer', 'Product Development Executive',
'Product Manager', 'Program Manager',
'Project Manager-It Software',
'Project Manager-Production Manufacturing Maintenance',
'Project Manager-Telecom', 'Public Relations Manager',

'Purchase Executive', 'Purchase Officer',
'Purchase Vendor Development Manager',
'Quality Assurance   Quality Control-Manager',
'Quality Assurance Manager', 'R D Executive', 'Rf System Designer',
'Rfi   Rfp Manager', 'Radiologist', 'Recruitment Executive',
'Relationship Executive', 'Release Manager', 'Restaurant Manager',
'Retail Manager', 'Safety Manager', 'Sales Trainer',
'Search Engine Optimisation Seo Lead',
'Search Engine Optimisation Seo Specialist',
'Senior Design Engineer', 'Senior Consultant',
'Service Delivery Leader', 'Service Manager', 'Soft Skill Trainer',
'Solution Architect', 'Visualiser', 'Staff Function',
'Staffing Specialist Manpower Planning',
'Store Keeper Warehouse Assistant', 'Subject Matter Expert',
'Surgeon', 'System Administrator', 'System Analyst',
'System Integration Technician', 'System Security',
'Teksystems Global Services (Tgs) Is The Software Services Division Of Teksystems. Teksystems Is A $4.3 Billion Organization With Over 150 Offices Across The Globe. Tgs Accounts For $600 Million And Has About 5000 Full Time Employees Across The Globe Of Which 1200 Are In India. Tgs Operates Through Multiple Solution Centers Across Locations Like Us (Dallas, Redmond, Bloomington, Baltimore, Maryland), Europe (Amsterdam, London), Canada, Manila And India (Bangalore And Hyderabad). We Are An Iso 27001 Certified Organization',
'Taxation(Direct) Manager', 'Taxation(Indirect) Manager',
'Technical Lead', 'Team Leader',
'Team Leader-Quality Assurance Quality Control',
'Technical   Process Trainer', 'Technical Architect',
'Technical Support Manager', 'Telecaller', 'Testing Engineer',
'Textile Designer', 'The Glove',
'Tour Management Manager Senior Manager', 'Trainer Faculty',
'Transitions Migrations Manager', 'Transport Distribution Manager',
'Travel Agent', 'Treasury Manager',
'Unisys Is A Worldwide Information Technology Company. We Provide A Portfolio Of It Services, Software, And Technology That Solves Critical Problems For Clients. We Specialize In Helping Clients Secure Their Operations, Increase The Efficiency And Utilization Of Their Data Centers, Enhance Support To Their End Users And Constituents, And Modernize Their Enterprise Applications. To Provide These Services And Solutions, We Bring Together Offerings And Capabilities In Outsourcing Services, Systems Integration And Consulting Services, Infrastructure Services, Maintenance Services, And High-End Server Technology. Unisys India Was Established In 2004 In Bangalore. We Have Strengthened Tremendously In Terms Of Headcount And Infrastructure, As Well As Capabilities To Become An Integral Part Of The Unisys Global Delivery Organization. Today, We Have Three State-Of-The-Art Facilities - Two In Bangalore And One In Hyderabad. At Unisys India You Will See A Representation From Most Functions Of Unisys. Be It Product Development For Systems

Technology, Application Design And Migration For Global Industries, Service Desk
Enterprise Computing   Itil Processes   Field Operations Back Office For Gois Or
Extensions Of Various Unisys Corporate Functions. We Are Here Today Because Of
Our Relentless Efforts Towards Timely, Quality And Cost Efficient Deliveries,
All Meant To Drive A High Level Of Customer Satisfaction At A Compelling Cost. A
Unique Blend Of Mature Processes, High Focus On Tools And, Above All A Team Of
Highly Talented And Motivated Employees Play A Critical Role In Making This
Possible. We Are Poised To Play An Increasingly Important Role In Unisys Journey
Towards Predictable And Profitable Growth. You Could Be A Part Of This Change.
Imagine It. Done. For More Information, Visit Http: Www.Unisys.Com',
        'Voice   Accent Trainer', 'Warehouse Manager',
        'Llegis Group India Is A Wholly Owned Subsidiary Of Allegis Group, Inc.
In India, The Company Specifically Focuses On Dealing With Technology Products
And Providing High-End Engineering Design And Analysis, It And Ites
Services,Vendor Management, Training And Staffing Services To Fortune 500
Clients. About Allegis Group: A Us $6 Billion World Leader In Staffing Services
To Over 4000 Customers Globally   Largest Technology Staffing Company In The
World Today. It, Telecom, Infrastructure And Engineering . One Of The Worlds
Largest Privately Held Companies. The 6Th Largest Staffing Company In The World
And The 2Nd Largest In The Us . One Of The Top Vendors To 99% Of Fortune 500
Companies. Employees Over 100,000 Employees Across Different Parts Of The World.
Operations In North America, Europe And Asia With Over 300 Offices And Now In
India'],
        dtype=object)

[176]:
```
df = pd.DataFrame(data)
```

[177]:
```python
import pandas as pd
import re

def categorize_job_title(title):
    # Preprocess
    title = str(title).strip().lower()

    # Patterns to detect company descriptions
    company_patterns = [
        r'about\s+[a-z0-9]',  # Starts with "About [Company]"
        r'https?://|www|\.com|\.in',  # Contains website references
        r'wholly owned subsidiary',
        r'employees|operations in|annual revenue|fortune \d+',
        r'we [a-z]+ service|we provide|we have',  # Company descriptions often
  ↪use "we"
        r'headquarters in|offices in|founded in',
        r'iso \d+ certified',  # Certification mentions
        r'our [a-z]+ team|our mission|we focus on',
        r'please visit',  # Call to action
        r'for more information',
```

```python
        r'contact us at',
        r'applicant privacy notice',
        r'equal opportunity employer',
        r'job description',
        r'salary:',
        r'industry:'
    ]

    # Check if any company pattern matches
    for pattern in company_patterns:
        if re.search(pattern, title, re.IGNORECASE):
            return 'Company Description'

    # Job title patterns (more comprehensive)
    title_mapping = {
        # Healthcare
        r'\b(medical|doctor|physician|nurse|pharmacist)\b': 'Healthcare',
        r'\b(surgeon|specialist|therapist|radiologist)\b': 'Medical Specialist',

        # Sales/Marketing
        r'\b(sales|business development|bdm|account)\b': 'Sales',
        r'\b(marketing|digital|seo|ppc|content)\b': 'Marketing',

        # HR/Admin
        r'\b(hr|human resources|recruitment|talent)\b': 'Human Resources',
        r'\b(admin|office|facility|secretary)\b': 'Administration',

        # Finance
        r'\b(finance|accountant|tax|auditor)\b': 'Finance',
        r'\b(banking|investment|insurance)\b': 'Financial Services',

        # Engineering
        r'\b(environmental|construction|architectural)\b': 'Construction',

        # Education
        r'\b(teacher|professor|educator|trainer)\b': 'Education',
        r'\b(student|research|academic)\b': 'Academic',

        # Creative
        r'\b(designer|artist|creative|writer|content)\b': 'Creative',
        r'\b(media|advertising|public relations)\b': 'Media',

        # Logistics
        r'\b(logistics|supply chain|warehouse)\b': 'Logistics',
        r'\b(transport|distribution|procurement)\b': 'Supply Chain',

        # Customer Service
```

```python
        r'\b(customer service|support|representative)\b': 'Customer Service',
        r'\b(call center|help desk|technical support)\b': 'Support',

        # Legal
        r'\b(legal|lawyer|attorney|compliance)\b': 'Legal',
        r'\b(contract|paralegal|notary)\b': 'Legal Support',

        # Entry Level
        r'\b(intern|trainee|entry level|junior)\b': 'Entry Level',
        r'\b(fresher|graduate|apprentice)\b': 'Entry Level',

        # Executive
        r'\b(ceo|cto|cfo|cio|cso)\b': 'C-Level Executive',
        r'\b(coo|cmo|cdo|cxo)\b': 'C-Level Executive',

        # Other
        r'\b(consultant|advisor|strategist)\b': 'Consultant',
        r'\b(project|program|product)\b': 'Project Management',
    }

    # Check title patterns
    for pattern, category in title_mapping.items():
        if re.search(pattern, title, re.IGNORECASE):
            return category

    # Handle special cases
    if 'assistant' in title:
        return 'Assistant'
    if 'specialist' in title:
        return 'Specialist'
    if 'coordinator' in title:
        return 'Coordinator'
    if 'associate' in title:
        return 'Associate'

    # Return original if no match
    return title.title()

# Apply to your DataFrame
df['standardized_title'] = df['job_title'].apply(categorize_job_title)

# Check results
print(df['standardized_title'].value_counts())
```

```
standardized_title
Data Scientist                              80551
Data Analyst                                39006
```

```
    Data Engineer                                        38941
    Software Developer                                     671
    Sales                                                  393
                                                           …
    Restaurant Manager                                       1
    Transition Manager                                       1
    Head Vp Gm-Quality Assurance   Quality Control          1
    Head Vp Gm-Mergers   Acquisitions                        1
    Treasury Manager                                         1
    Name: count, Length: 120, dtype: int64
```

[178]: `df['standardized_title'].unique()`

[178]:
```
array(['Company Description', 'Creative', 'Accounts Manager', 'Finance',
       'Marketing', 'Anaesthetist', 'Data Analyst', 'Associate',
       'Architect', 'Area   Territory Manager', 'Sales', 'Manager',
       'Assistant', 'Education', 'Project Management',
       'Beauty Manager   Beautician', 'Academic', 'Training Manager',
       'Operations Manager', 'Regional Manager', 'Business Analyst',
       'C-Level Executive', 'Csr Manager', 'Customer Service',
       'Healthcare', 'Cards-Operations Manager',
       'Client Relationship Manager', 'Administration', 'Construction',
       'Corporate Communications Manager', 'Strategic Manager',
       'Counselor', 'Credit Control Executive', 'Database Administrator',
       'Data Engineer', 'Data Scientist', 'Dean   Director',
       'Engineering Manager', 'Design Manager',
       'Documentation Shipping-Executive Manager', 'Consultant',
       'Electrical Engineer', 'Medical Specialist',
       'Executive  Sr Executive - Administration', 'Ford', 'Entry Level',
       'Software Developer', 'Hod', 'Human Resources',
       'Head   Vp  Gm-Taxation', 'Media', 'Head Vp Gm - Analytics   Bi',
       'Head Vp Gm-Administration   Facilities', 'Broker Manager',
       'Head Vp Gm-Compensation   Benefits', 'Risk Manager',
       'Head Vp Gm-Mergers   Acquisitions', 'Production Manager',
       'Purchasing Manager',
       'Head Vp Gm-Quality Assurance   Quality Control', 'R&D Manager',
       'Regulatory Affairs Manager', 'Logistics',
       'Head Vp Gm-Training   Development', 'Transition Manager',
       'Underwriting Manager', 'It Manager', 'Technology Manager',
       'Financial Services', 'Investor Relations Manager', 'Legal',
       'Mis Manager', 'Manager   Sr Manager - Administration',
       'Material Manager', 'Mechanical Engineer', 'Director',
       'Neurologist', 'Orthopaedist', 'Other',
       'Pay Roll Compensation Manager', 'Pediatrician',
       'Performance Manager', 'Practice Head   Practice Manager',
       'Purchase Executive', 'Purchase Officer',
       'Purchase Vendor Development Manager',
```

```
          'Quality Assurance    Quality Control-Manager',
          'Quality Assurance Manager', 'R D Executive', 'Rfi    Rfp Manager',
          'Relationship Executive', 'Release Manager', 'Restaurant Manager',
          'Retail Manager', 'Safety Manager', 'Senior Design Engineer',
          'Service Delivery Leader', 'Service Manager', 'Solution Architect',
          'Visualiser', 'Staff Function', 'Subject Matter Expert',
          'System Administrator', 'System Analyst',
          'System Integration Technician', 'System Security',
          'Taxation(Direct) Manager', 'Taxation(Indirect) Manager',
          'Technical Lead', 'Team Leader',
          'Team Leader-Quality Assurance Quality Control',
          'Technical Architect', 'Telecaller', 'Testing Engineer',
          'The Glove', 'Tour Management Manager Senior Manager',
          'Transitions Migrations Manager', 'Supply Chain', 'Travel Agent',
          'Treasury Manager'], dtype=object)
```

```python
[179]:  import pandas as pd
        import re

        # Assuming job_titles is your unique array from the column:
        job_titles = df['standardized_title'].unique()

        # Define cleanup patterns
        merge_patterns = [
            # 1. Handle R&D variations
            (r'\bR\s*[&-]?\s*D\b', 'R&D'),
            (r'\bR\s+D\b', 'R&D'),

            # 2. Normalize management titles
            (r'\bHead\s+Vp\s+Gm\b', 'Head/VP/GM'),
            (r'\bVp\b', 'VP'),
            (r'\bGm\b', 'GM'),

            # 3. Fix spacing issues
            (r'\s{2,}', ' '),  # Multiple spaces to single
            (r'\s*[-/]\s*', ' - '),  # Standardize separators

            # 4. Quality assurance/control
            (r'\bQA\s*[/ ]*QC\b', 'Quality Assurance/Control'),

            # 5. IT-specific roles preservation
            (r'\b(?:Software|Data|Cloud|DevOps|System|Network|Security)\b.*', lambda m:
        ↪m.group().title()),

            # 6. Special cases
            (r'\bThe\s+Glove\b', 'Apparel/Garment Designer'),
            (r'\bFord\b', 'Automotive Industry Role'),
```

```python
]

def clean_title(title):
    cleaned = str(title).strip()
    for pattern, repl in merge_patterns:
        cleaned = re.sub(pattern, repl, cleaned, flags=re.IGNORECASE)
    return cleaned.title()

# Create DataFrame for demonstration
unique_titles = pd.Series([
    'R D Manager', 'Head Vp Gm-Taxation', 'Quality Assurance   Quality␣
 ↪Control-Manager',
    'Software Developer', 'The Glove', 'Rfi   Rfp Manager', 'IT Manager'
])

# Process titles
cleaned_titles = unique_titles.apply(clean_title)

# Show results
print("Before:\n", unique_titles.values)
print("\nAfter:\n", cleaned_titles.values)
```

```
Before:
 ['R D Manager' 'Head Vp Gm-Taxation'
 'Quality Assurance   Quality Control-Manager' 'Software Developer'
 'The Glove' 'Rfi   Rfp Manager' 'IT Manager']

After:
 ['R&D Manager' 'Head - Vp - Gm - Taxation'
 'Quality Assurance Quality Control - Manager' 'Software Developer'
 'Apparel/Garment Designer' 'Rfi Rfp Manager' 'It Manager']
```

[182]:
```python
# Get unique titles from your DataFrame
job_titles = df['standardized_title'].unique()

# Process
cleaned_titles = pd.Series(job_titles).apply(clean_title)

# Convert back to numpy array if needed
cleaned_array = cleaned_titles.values

# To update the original DataFrame:
df['cleaned_title'] = df['standardized_title'].apply(clean_title)
```

[191]:
```python
print(df['cleaned_title'].value_counts())
df['cleaned_title'].unique()
```

```
cleaned_title
Data Scientist                                    80551
Data Analyst                                      39006
Data Engineer                                     38941
Software Developer                                  671
Sales                                               393
                                                    …
Restaurant Manager                                    1
Transition Manager                                    1
Head - Vp - Gm - Quality Assurance Quality Control    1
Head - Vp - Gm - Mergers Acquisitions                 1
Treasury Manager                                      1
Name: count, Length: 120, dtype: int64
```

[191]: array(['Company Description', 'Creative', 'Accounts Manager', 'Finance',
       'Marketing', 'Anaesthetist', 'Data Analyst', 'Associate',
       'Architect', 'Area Territory Manager', 'Sales', 'Manager',
       'Assistant', 'Education', 'Project Management',
       'Beauty Manager Beautician', 'Academic', 'Training Manager',
       'Operations Manager', 'Regional Manager', 'Business Analyst',
       'C - Level Executive', 'Csr Manager', 'Customer Service',
       'Healthcare', 'Cards - Operations Manager',
       'Client Relationship Manager', 'Administration', 'Construction',
       'Corporate Communications Manager', 'Strategic Manager',
       'Counselor', 'Credit Control Executive', 'Database Administrator',
       'Data Engineer', 'Data Scientist', 'Dean Director',
       'Engineering Manager', 'Design Manager',
       'Documentation Shipping - Executive Manager', 'Consultant',
       'Electrical Engineer', 'Medical Specialist',
       'Executive Sr Executive - Administration',
       'Automotive Industry Role', 'Entry Level', 'Software Developer',
       'Hod', 'Human Resources', 'Head - Vp - Gm - Taxation', 'Media',
       'Head - Vp - Gm - Analytics Bi',
       'Head - Vp - Gm - Administration Facilities', 'Broker Manager',
       'Head - Vp - Gm - Compensation Benefits', 'Risk Manager',
       'Head - Vp - Gm - Mergers Acquisitions', 'Production Manager',
       'Purchasing Manager',
       'Head - Vp - Gm - Quality Assurance Quality Control',
       'R&D Manager', 'Regulatory Affairs Manager', 'Logistics',
       'Head - Vp - Gm - Training Development', 'Transition Manager',
       'Underwriting Manager', 'It Manager', 'Technology Manager',
       'Financial Services', 'Investor Relations Manager', 'Legal',
       'Mis Manager', 'Manager Sr Manager - Administration',
       'Material Manager', 'Mechanical Engineer', 'Director',
       'Neurologist', 'Orthopaedist', 'Other',
       'Pay Roll Compensation Manager', 'Pediatrician',
       'Performance Manager', 'Practice Head Practice Manager',

```
                'Purchase Executive', 'Purchase Officer',
                'Purchase Vendor Development Manager',
                'Quality Assurance Quality Control - Manager',
                'Quality Assurance Manager', 'R&D Executive', 'Rfi Rfp Manager',
                'Relationship Executive', 'Release Manager', 'Restaurant Manager',
                'Retail Manager', 'Safety Manager', 'Senior Design Engineer',
                'Service Delivery Leader', 'Service Manager', 'Solution Architect',
                'Visualiser', 'Staff Function', 'Subject Matter Expert',
                'System Administrator', 'System Analyst',
                'System Integration Technician', 'System Security',
                'Taxation(Direct) Manager', 'Taxation(Indirect) Manager',
                'Technical Lead', 'Team Leader',
                'Team Leader - Quality Assurance Quality Control',
                'Technical Architect', 'Telecaller', 'Testing Engineer',
                'Apparel/Garment Designer',
                'Tour Management Manager Senior Manager',
                'Transitions Migrations Manager', 'Supply Chain', 'Travel Agent',
                'Treasury Manager'], dtype=object)
```

[194]:
```python
# After creating 'cleaned_title' column
data['job_title'] = df['cleaned_title']

# Verify
print(data['job_title'].value_counts())
```

```
job_title
Data Scientist                                          80551
Data Analyst                                            39006
Data Engineer                                           38941
Software Developer                                        671
Sales                                                     393
                                                          …
Restaurant Manager                                          1
Transition Manager                                          1
Head - Vp - Gm - Quality Assurance Quality Control          1
Head - Vp - Gm - Mergers Acquisitions                       1
Treasury Manager                                            1
Name: count, Length: 120, dtype: int64
```

[199]:
```python
# Calculate value counts for job titles
title_counts = data['job_title'].value_counts()

# Filter out titles that appear less than 2 times (keep those with count >= 2)
valid_titles = title_counts[title_counts >= 5].index

# Create filtered DataFrame
data = data[data['job_title'].isin(valid_titles)]
```

```
# Check results
print(f"Original rows: {len(data)}")
print(f"Filtered rows: {len(data_filtered)}")
print(f"Removed {len(data) - len(data_filtered)} rows with unique job titles")
```

```
Original rows: 161124
Filtered rows: 161140
Removed -16 rows with unique job titles
```

[209]:
```
data.drop(data[data['job_title'] == 'Company Description'].index, inplace=True)
print(data['job_title'].value_counts())
```

```
job_title
Data Scientist                  80551
Data Analyst                    39006
Data Engineer                   38941
Software Developer                671
Sales                             393
Project Management                147
Finance                           139
Marketing                         113
Technical Lead                    108
Human Resources                    91
Academic                           73
Operations Manager                 63
Regional Manager                   47
Accounts Manager                   42
Client Relationship Manager        37
Consultant                         37
Technical Architect                36
Creative                           35
Testing Engineer                   35
Business Analyst                   33
Customer Service                   31
Training Manager                   30
System Administrator               28
Logistics                          26
Team Leader                        26
Engineering Manager                24
Quality Assurance Manager          24
Education                          23
Healthcare                         23
Medical Specialist                 20
Database Administrator             16
Production Manager                 15
System Analyst                     15
Area Territory Manager             15
```

```
It Manager                                     15
Senior Design Engineer                         12
Purchase Vendor Development Manager            12
Administration                                 12
Manager                                        12
Strategic Manager                              11
Other                                          11
C - Level Executive                            10
Taxation(Direct) Manager                        9
Retail Manager                                  9
System Security                                 9
Architect                                       8
Manager Sr Manager - Administration             8
Head - Vp - Gm - Analytics Bi                   6
Solution Architect                              6
Purchasing Manager                              6
Media                                           6
Construction                                    6
Visualiser                                      5
Design Manager                                  5
Regulatory Affairs Manager                      5
Executive Sr Executive - Administration         5
Entry Level                                     5
Anaesthetist                                    5
Service Delivery Leader                         5
Name: count, dtype: int64
```

[210]:
```
data.to_csv("C:/Users/Manas/OneDrive/Documents/TYDS Final Year Project/TYDS␣
 ↪Project Data/Merged_data2.csv", index = False)
```

[211]:
```
data
```

[211]:
```
                    job_title                            combined_skills  \
1                    Creative  ['General Skills', ' Home Decor', ' bags', ' c…
2             Accounts Manager  [' Internal Audit', ' SOX', 'General Skills', …
3             Accounts Manager       [' Accounting Operations', 'General Skills']
4             Accounts Manager  [' balance sheet', ' esi', ' finance', 'Genera…
5             Accounts Manager  [' Accounts Receivable', ' Accounts Payable', …
…                         …                                              …
161118                Finance  [' Cross Selling', ' Wealth', ' NR', ' Relatio…
161119     Software Developer  [' web designing', ' css', ' flash', 'General …
161120     Software Developer  [' web designer', ' web designing', ' website …
161121     Software Developer  [' Team Building', 'General Skills', ' Web Pro…
161122     Operations Manager  [' Forklift', 'General Skills', ' Crane Operat…

        average_salary_value   average_experience
1                     266666                    0
```

```
2                    183333                        0
3                    416666                        0
4                    166666                        0
5                    166666                        0
…                       …                          …
161118               175000                        0
161119               166666                        0
161120               191666                        0
161121               162500                        0
161122               275000                        0

[161117 rows x 4 columns]
```

[213]: `data.info()`

```
<class 'pandas.core.frame.DataFrame'>
Index: 161117 entries, 1 to 161122
Data columns (total 4 columns):
 #   Column                 Non-Null Count    Dtype
---  ------                 --------------    -----
 0   job_title              161117 non-null   object
 1   combined_skills        161117 non-null   object
 2   average_salary_value   161117 non-null   int64
 3   average_experience     161117 non-null   int64
dtypes: int64(2), object(2)
memory usage: 6.1+ MB
```