

ASSIGNMENT OUTPUT

TASK 1: Load the data using Python:using Pandas

```
-----
      Name  Age      DOB  Experience  Salary_CT  \
1  Sakthivelu Fabin   39  18/01/1972        10  115665.07
2      Graha Ezhil   26  24/11/1969        17   61926.35
3      Selva Cathi   60  27/05/1988        10  117920.47
4      Anu Garuda   56  12/08/1986         5  125312.51
5  Dakshinesh Dina   30  20/04/1975        12  121290.36
...      ...    ...      ...      ...      ...
9996      Selva Ezhil   30  26/02/1994         4   94920.45
9997  Dakshinesh Dina   28  21/02/1987        14   80103.56
9998  Dakshinesh Dina   41  29/12/1994        14  142525.02
9999      Anu Dina   56  03/11/1977         6  102323.96
10000  Dakshinesh Dina   35  14/12/1997        19   85391.36
```

```

Skills
1 Python,Data Science,Data engineering,Java, Inf...
2 Machine Learning
3 Data Science,SQL, Information and cybersecurit...
4 AWS,Data Analytics, Information and cybersecur...
5 Business application development,SQL
...
9996 Machine Learning, Information and cybersecurit...
9997 SQL
9998 Data Science, Information and cybersecurity,SQ...
9999 AWS,SQL,Python,Data Science
10000 AWS,Data Analytics,Data engineering,Business a...

```

Cleansing Process/Transformation Process

Data Types:

```

Name          object
Age           int64
DOB           datetime64[ns]
Experience     int64
Salary_CT     float64
Skills        object

```

dtype: object

Sum of Duplicates: 0

```
Sum of NAN values Name      0
```

```
Age      0
```

```
DOB      0
```

```
Experience 0
```

```
Salary_CT 0
```

```
Skills    0
```

dtype: int64

TASK 2: Filter the top 500 experienced and store it in another variable.

```

-----
      Name  Age      DOB  Experience  Salary_CT  \
0      Reshma Anbu   52 1991-10-27         20 135892.26
1    Prabavathi Dina   52 1965-01-08         20 144821.29
2          Anu Anbu   43 1995-11-23         20   69630.58
3      Jeyam Cathi   42 1972-10-05         20 120972.16
4      Anu Garuda   48 1969-05-27         20   87612.12
...      ...      ...      ...      ...      ...
9995  Dakshinesh Garuda   25 1985-12-09         1 109375.24
9996  Prabavathi Balu   41 2004-04-18         1   99226.33
9997          Anu Jana   43 1972-01-04         1 138448.68
9998  Prabavathi Cathi   40 1973-02-03         1 112604.27
9999  Dakshinesh Huma   35 1990-02-14         1   55780.57

```

```

      Skills
0  SQL,Data Analytics,Data engineering,Java,JavaS...
1      JavaScript,Business application development
2  Business application development,Data Science,...
3  Java,JavaScript, Information and cybersecurity...
4  Data engineering,AWS,JavaScript,DevOps,SQL,Pyt...
...      ...
9995  Information and cybersecurity,Machine Learnin...
9996  Python,DevOps,SQL,Data Science,Machine Learnin...
9997      Data engineering,Machine Learning
9998  Information and cybersecurity,SQL,Java,Data A...
9999  Java,Machine Learning,JavaScript, Information ...

```

```

      Name  Age      DOB  Experience  Salary_CT  \
1      Reshma Anbu   52 1991-10-27         20 135892.26
2    Prabavathi Dina   52 1965-01-08         20 144821.29
3          Anu Anbu   43 1995-11-23         20   69630.58
4      Jeyam Cathi   42 1972-10-05         20 120972.16
5      Anu Garuda   48 1969-05-27         20   87612.12
..      ...      ...      ...      ...      ...
496    Graha Garuda   56 1966-07-22         20   91959.00
497    Reshma Huma   35 1964-08-22         20   78369.60
498    Brindha Fabin   46 1992-12-13         20   92923.52
499    Graha Cathi   58 1982-08-15         20   92420.67
500  Sakthivelu Garuda   37 2005-08-07         20   59949.75

```

```

Skills
1 SQL,Data Analytics,Data engineering,Java,JavaS...
2 JavaScript,Business application development
3 Business application development,Data Science,...
4 Java,JavaScript, Information and cybersecurity...
5 Data engineering,AWS,JavaScript,DevOps,SQL,Pyt...
.. ...
496 DevOps,Java
497 Python,Machine Learning,DevOps,Data Analytics,...
498 DevOps, Information and cybersecurity,Python,J...
499 Data engineering,DevOps,SQL,Business applicati...
500 DevOps

```

TASK 3: Then Count their skills and store them in the new column.

```

-----
      Name  Age   DOB  Experience  Salary_CT  \
1    Reshma Anbu  52 1991-10-27         20  135892.26
2  Prabavathi Dina  52 1965-01-08         20  144821.29
3      Anu Anbu  43 1995-11-23         20   69630.58
4    Jeyam Cathi  42 1972-10-05         20  120972.16
5    Anu Garuda  48 1969-05-27         20   87612.12
..      ...    ...      ...      ...      ...
496  Graha Garuda  56 1966-07-22         20   91959.00
497  Reshma Huma  35 1964-08-22         20   78369.60
498  Brindha Fabin  46 1992-12-13         20   92923.52
499  Graha Cathi  58 1982-08-15         20   92420.67
500 Sakthivelu Garuda  37 2005-08-07         20   59949.75

Skills  Skill_count
1 SQL,Data Analytics,Data engineering,Java,JavaS...      5
2 JavaScript,Business application development              2
3 Business application development,Data Science,...        8
4 Java,JavaScript, Information and cybersecurity...       12
5 Data engineering,AWS,JavaScript,DevOps,SQL,Pyt...        7
..      ...      ...
496 DevOps,Java                                           2
497 Python,Machine Learning,DevOps,Data Analytics,...      7
498 DevOps, Information and cybersecurity,Python,J...      9
499 Data engineering,DevOps,SQL,Business applicati...      8
500 DevOps                                                1

```


Task 4: Then segregate their skill sets in separate columns.

| | Name | Age | DOB | Experience | Salary_CT | \ |
|-----|-------------------|-----|------------|------------|-----------|---|
| 1 | Reshma Anbu | 52 | 1991-10-27 | 20 | 135892.26 | |
| 2 | Prabavathi Dina | 52 | 1965-01-08 | 20 | 144821.29 | |
| 3 | Anu Anbu | 43 | 1995-11-23 | 20 | 69630.58 | |
| 4 | Jeyam Cathi | 42 | 1972-10-05 | 20 | 120972.16 | |
| 5 | Anu Garuda | 48 | 1969-05-27 | 20 | 87612.12 | |
| .. | ... | ... | ... | ... | ... | |
| 496 | Graha Garuda | 56 | 1966-07-22 | 20 | 91959.00 | |
| 497 | Reshma Huma | 35 | 1964-08-22 | 20 | 78369.60 | |
| 498 | Brindha Fabin | 46 | 1992-12-13 | 20 | 92923.52 | |
| 499 | Graha Cathi | 58 | 1982-08-15 | 20 | 92420.67 | |
| 500 | Sakthivelu Garuda | 37 | 2005-08-07 | 20 | 59949.75 | |

| | Skills | Skill_count | \ |
|-----|---|-------------|---|
| 1 | SQL,Data Analytics,Data engineering,Java,JavaS... | 5 | |
| 2 | JavaScript,Business application development | 2 | |
| 3 | Business application development,Data Science,... | 8 | |
| 4 | Java,JavaScript, Information and cybersecurity... | 12 | |
| 5 | Data engineering,AWS,JavaScript,DevOps,SQL,Pyt... | 7 | |
| .. | ... | ... | |
| 496 | DevOps,Java | 2 | |
| 497 | Python,Machine Learning,DevOps,Data Analytics,... | 7 | |
| 498 | DevOps, Information and cybersecurity,Python,J... | 9 | |
| 499 | Data engineering,DevOps,SQL,Business applicati... | 8 | |
| 500 | DevOps | 1 | |

| | Skill_1 | Skill_2 | \ |
|-----|----------------------------------|----------------------------------|---|
| 1 | SQL | Data Analytics | |
| 2 | JavaScript | Business application development | |
| 3 | Business application development | Data Science | |
| 4 | Java | JavaScript | |
| 5 | Data engineering | AWS | |
| .. | ... | ... | |
| 496 | DevOps | Java | |
| 497 | Python | Machine Learning | |
| 498 | DevOps | Information and cybersecurity | |
| 499 | Data engineering | DevOps | |
| 500 | DevOps | None | |

| | Skill_3 | Skill_4 \ |
|-----|-------------------------------|----------------------------------|
| 1 | Data engineering | Java |
| 2 | None | None |
| 3 | Information and cybersecurity | JavaScript |
| 4 | Information and cybersecurity | Business application development |
| 5 | JavaScript | DevOps |
| .. | ... | ... |
| 496 | None | None |
| 497 | DevOps | Data Analytics |
| 498 | Python | JavaScript |
| 499 | SQL | Business application development |
| 500 | None | None |

| | Skill_5 | Skill_6 \ |
|-----|----------------|----------------------------------|
| 1 | JavaScript | None |
| 2 | None | None |
| 3 | Data Analytics | Machine Learning |
| 4 | Data Science | SQL |
| 5 | SQL | Python |
| .. | ... | ... |
| 496 | None | None |
| 497 | SQL | Information and cybersecurity |
| 498 | SQL | Business application development |
| 499 | AWS | Java |
| 500 | None | None |

| | Skill_7 | Skill_8 | Skill_9 \ |
|-----|----------------------------------|------------------|----------------|
| 1 | None | None | None |
| 2 | None | None | None |
| 3 | DevOps | AWS | None |
| 4 | AWS | Machine Learning | Data Analytics |
| 5 | Data Analytics | None | None |
| .. | ... | ... | ... |
| 496 | None | None | None |
| 497 | Business application development | None | None |
| 498 | Machine Learning | AWS | Java |
| 499 | Information and cybersecurity | Python | None |
| 500 | None | None | None |

| | Skill_10 | Skill_11 | Skill_12 |
|-----|------------------|----------|----------|
| 1 | None | None | None |
| 2 | None | None | None |
| 3 | None | None | None |
| 4 | Data engineering | DevOps | Python |
| 5 | None | None | None |
| .. | ... | ... | ... |
| 496 | None | None | None |
| 497 | None | None | None |
| 498 | None | None | None |
| 499 | None | None | None |
| 500 | None | None | None |

Task 5: Finally filter who has having top 50 unique skill set of those 500.

Top_50_unique_skills_DataFrame:

| | Name | Age | DOB | Experience | Salary_CT | \ |
|-----|-------------------|-----|------------|------------|-----------|---|
| 1 | Reshma Anbu | 52 | 1991-10-27 | 20 | 135892.26 | |
| 2 | Prabavathi Dina | 52 | 1965-01-08 | 20 | 144821.29 | |
| 3 | Anu Anbu | 43 | 1995-11-23 | 20 | 69630.58 | |
| 4 | Jeyam Cathi | 42 | 1972-10-05 | 20 | 120972.16 | |
| 5 | Anu Garuda | 48 | 1969-05-27 | 20 | 87612.12 | |
| .. | ... | ... | ... | ... | ... | |
| 496 | Graha Garuda | 56 | 1966-07-22 | 20 | 91959.00 | |
| 497 | Reshma Huma | 35 | 1964-08-22 | 20 | 78369.60 | |
| 498 | Brindha Fabin | 46 | 1992-12-13 | 20 | 92923.52 | |
| 499 | Graha Cathi | 58 | 1982-08-15 | 20 | 92420.67 | |
| 500 | Sakthivelu Garuda | 37 | 2005-08-07 | 20 | 59949.75 | |

| | Skills | Skill_count | \ |
|-----|---|-------------|---|
| 1 | SQL,Data Analytics,Data engineering,Java,JavaS... | 5 | |
| 2 | JavaScript,Business application development | 2 | |
| 3 | Business application development,Data Science,... | 8 | |
| 4 | Java,JavaScript, Information and cybersecurity... | 12 | |
| 5 | Data engineering,AWS,JavaScript,DevOps,SQL,Pyt... | 7 | |
| .. | ... | ... | |
| 496 | DevOps,Java | 2 | |
| 497 | Python,Machine Learning,DevOps,Data Analytics,... | 7 | |
| 498 | DevOps, Information and cybersecurity,Python,J... | 9 | |
| 499 | Data engineering,DevOps,SQL,Business applicati... | 8 | |
| 500 | DevOps | 1 | |

| | Skill_1 | Skill_2 \ |
|-----|----------------------------------|----------------------------------|
| 1 | SQL | Data Analytics |
| 2 | JavaScript | Business application development |
| 3 | Business application development | Data Science |
| 4 | Java | JavaScript |
| 5 | Data engineering | AWS |
| .. | ... | ... |
| 496 | DevOps | Java |
| 497 | Python | Machine Learning |
| 498 | DevOps | Information and cybersecurity |
| 499 | Data engineering | DevOps |
| 500 | DevOps | None |

| | Skill_3 | Skill_4 \ |
|-----|-------------------------------|----------------------------------|
| 1 | Data engineering | Java |
| 2 | None | None |
| 3 | Information and cybersecurity | JavaScript |
| 4 | Information and cybersecurity | Business application development |
| 5 | JavaScript | DevOps |
| .. | ... | ... |
| 496 | None | None |
| 497 | DevOps | Data Analytics |
| 498 | Python | JavaScript |
| 499 | SQL | Business application development |

| | Skill_5 | Skill_6 \ |
|-----|----------------|----------------------------------|
| 1 | JavaScript | None |
| 2 | None | None |
| 3 | Data Analytics | Machine Learning |
| 4 | Data Science | SQL |
| 5 | SQL | Python |
| .. | ... | ... |
| 496 | None | None |
| 497 | SQL | Information and cybersecurity |
| 498 | SQL | Business application development |
| 499 | AWS | Java |
| 500 | None | None |

| | Skill_7 | Skill_8 | Skill_9 \ |
|-----|----------------------------------|------------------|----------------|
| 1 | None | None | None |
| 2 | None | None | None |
| 3 | DevOps | AWS | None |
| 4 | AWS | Machine Learning | Data Analytics |
| 5 | Data Analytics | None | None |
| .. | ... | ... | ... |
| 496 | None | None | None |
| 497 | Business application development | None | None |
| 498 | Machine Learning | AWS | Java |
| 499 | Information and cybersecurity | Python | None |
| 500 | None | None | None |

| | Skill_10 | Skill_11 | Skill_12 |
|-----|------------------|----------|----------|
| 1 | None | None | None |
| 2 | None | None | None |
| 3 | None | None | None |
| 4 | Data engineering | DevOps | Python |
| 5 | None | None | None |
| .. | ... | ... | ... |
| 496 | None | None | None |
| 497 | None | None | None |
| 498 | None | None | None |
| 499 | None | None | None |
| 500 | None | None | None |