**Dataset with Missing Values**

| **Employee\_ID** | **Experience (Years)** | **Education Level** | **Age** | **Job Role** | **City** | **Working Hours/Week** | **Salary ($)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | Bachelor’s | 25 | Engineer | New York | 40 | 60000 |
| 2 | 5 | Master’s | 30 | Manager | **NaN** | 45 | 90000 |
| 3 | **NaN** | PhD | 35 | Scientist | Boston | 50 | 120000 |
| 4 | 1 | **NaN** | 22 | Engineer | Seattle | 38 | 55000 |
| 5 | 10 | Master’s | 40 | **NaN** | Chicago | 48 | 110000 |
| 6 | **NaN** | PhD | 28 | Scientist | New York | 42 | 95000 |
| 7 | 12 | **NaN** | 45 | Engineer | Boston | 41 | 115000 |
| 8 | 3 | Bachelor’s | 26 | Manager | **NaN** | 44 | 70000 |
| 9 | 7 | PhD | 33 | Scientist | Seattle | **NaN** | 105000 |
| 10 | 4 | Master’s | 29 | Engineer | San Francisco | 43 | **NaN** |
| 11 | 5 | Bachelor’s | 27 | Manager | New York | 40 | 72000 |
| 12 | 9 | PhD | **NaN** | Scientist | Boston | 47 | 125000 |
| 13 | 2 | Bachelor’s | 24 | Engineer | Seattle | **NaN** | 60000 |
| 14 | 11 | Master’s | 42 | Manager | **NaN** | 50 | 118000 |
| 15 | **NaN** | PhD | 31 | Scientist | New York | 41 | 99000 |
| 16 | 13 | Master’s | 46 | Engineer | San Francisco | **NaN** | 123000 |
| 17 | 3 | **NaN** | 23 | Manager | Boston | 39 | 68000 |
| 18 | 8 | PhD | 34 | Scientist | Seattle | 48 | **NaN** |
| 19 | 4 | Master’s | 28 | Engineer | Chicago | **NaN** | 80000 |
| 20 | 7 | Bachelor’s | **NaN** | Manager | New York | 46 | 97000 |
| 21 | 10 | **NaN** | 38 | Scientist | Boston | 45 | 128000 |
| 22 | 2 | Master’s | 26 | Engineer | San Francisco | 41 | **NaN** |
| 23 | 9 | Bachelor’s | **NaN** | Manager | Seattle | 40 | 101000 |
| 24 | 5 | PhD | 29 | Scientist | Chicago | 50 | 98000 |
| 25 | **NaN** | Master’s | 43 | Engineer | New York | 42 | 115000 |
| 26 | 6 | Bachelor’s | 30 | Manager | **NaN** | 43 | 87000 |
| 27 | 11 | PhD | 39 | Scientist | Seattle | 49 | 130000 |
| 28 | 1 | Bachelor’s | 22 | **NaN** | Chicago | 37 | 53000 |
| 29 | 8 | Master’s | 35 | Manager | San Francisco | 45 | 109000 |
| 30 | 7 | PhD | **NaN** | Scientist | New York | 42 | 112000 |
| 31 | 3 | **NaN** | 25 | Engineer | Boston | 39 | 65000 |
| 32 | 10 | Master’s | 40 | Manager | Seattle | 44 | 108000 |
| 33 | 2 | PhD | 27 | Scientist | Chicago | **NaN** | 91000 |
| 34 | 9 | Bachelor’s | 38 | Engineer | San Francisco | 40 | 106000 |
| 35 | 6 | Master’s | 31 | Manager | New York | **NaN** | 88000 |
| 36 | 12 | **NaN** | 45 | Scientist | Boston | 50 | 135000 |
| 37 | 4 | Bachelor’s | 28 | Engineer | Seattle | 41 | 78000 |
| 38 | 7 | Master’s | 33 | Manager | Chicago | 45 | 95000 |
| 39 | 5 | PhD | **NaN** | Scientist | San Francisco | 48 | 101000 |
| 40 | 11 | Master’s | 42 | **NaN** | New York | 39 | 120000 |
| 41 | 2 | Bachelor’s | 24 | Manager | Boston | **NaN** | 64000 |
| 42 | 10 | PhD | 41 | Scientist | Seattle | 49 | **NaN** |
| 43 | **NaN** | Master’s | 26 | Engineer | Chicago | 40 | 70000 |
| 44 | 8 | Bachelor’s | 34 | Manager | San Francisco | 42 | 102000 |
| 45 | **NaN** | PhD | 29 | Scientist | New York | 47 | 99000 |
| 46 | 12 | Master’s | **NaN** | Engineer | Boston | 44 | 124000 |
| 47 | 5 | Bachelor’s | 27 | Manager | Seattle | 39 | 78000 |
| 48 | 9 | PhD | 36 | Scientist | Chicago | 50 | 127000 |
| 49 | 4 | Master’s | 28 | Engineer | San Francisco | 41 | **NaN** |
| 50 | 7 | Bachelor’s | 33 | Manager | New York | 43 | 95000 |

**Handling Missing Values in Machine Learning**

1. **Drop Missing Values** (if the dataset is large and missing values are few).
2. **Impute Missing Values**:
   * **Numerical Data**: Use mean, median, or mode.
   * **Categorical Data**: Use mode (most frequent value) or "Unknown".
3. **Predict Missing Values** using other available data.