# A4A Problem Statement

Given 2 documents "Buyer.csv" & "Supplier.csv", build a solution that reconciles / matches the txns. The solution should -:

1. categorize the txns into Exact / Partial / Only in Buyer / Only in Supplier categories

2. handle matching of number / string / date

**Definitions**

Exact Match - 2 elements are an exact match if they are exactly the same

Partial Match -

1. Number1, Number2 match partially if Number2 is in range of Number1 +/- threshold
2. String1, String2 match partially if String2 is similar to String1
3. Date1, Date2 match partially if Date2 is in range of Date1 +/- threshold
4. \*If there are multiple partial matches, the ‘best partial match’ should show up

**Notes**

1. Working code is super important
2. Code quality is table stakes
3. System Design should be Extensible / Flexible
4. Can use open source libraries with proper justification

**Example**

Doc1

Name RegNum Salary

Ram 12A3 9000

Shyam 12A4 8500

Doc2

Name RegNum Salary

Raam 12A3 9000

Shyam 12A4$ 8501

Output

Name RegNum Salary Category Name RegNum Salary

Ram 12A3 9000 Partial Raam 12A3 9000

Shyam 12A4 8500 Partial Shyam 12A4$ 8501