

To calculate the **Jaccard coefficient** for each pair, we will compare the attributes (excluding names) as binary values:

- Yes/Positive (Y/P) = 1
- No/Negative (N/A) = 0

Let's first convert the table values for each individual into binary representations for comparison:

Name	Gender	Fever	Cough	Test-1	Test-2	Test-3	Test-4
Jack	1	1	0	1	0	0	0
Mary	0	1	0	1	0	1	0
Jim	1	1	1	0	0	0	0

Calculation of Jaccard Coefficient

The **Jaccard coefficient** is calculated using the following formula:

$$J(A,B)=\frac{|A \cap B|}{|A \cup B|}$$

Where:

- $|A \cap B|$ is the number of attributes that are the same and equal to 1 for both individuals.
- $|A \cup B|$ is the total number of attributes that are 1 for at least one of the individuals.

1. Pair: (Jack, Mary)

- **Intersection:** Gender, Fever, Test-1, Test-4
 - Values: [1, 1, 1, 0]