

Table Representation

name	x	y
Alice	30	20
Bob	5	11
Cindy	-2	50

list of list representation



```
header = ["name", "x", "y"]
rows = [
    ["Alice", 30, 20],
    ["Bob", 5, 11],
    ["Cindy", -2, 50],
]
```

Table Representation

name	x	y
Alice	30	20
Bob	5	11
Cindy	-2	50

list of list representation



```
header = ["name", "x", "y"]  
rows = [  
    ["Alice", 30, 20],  
    ["Bob", 5, 11],  
    ["Cindy", -2, 50],  
]
```

list of dict representation



```
[  
    {"name": "Alice", "x": 30, "y": 20},  
    {"name": "Bob", "x": 5, "y": 11},  
    {"name": "Cindy", "x": -2, "y": 50},  
]
```

Table Representation

name	x	y
Alice	30	20
Bob	5	11
Cindy	-2	50

list of list representation



```
header = ["name", "x", "y"]
rows = [
    ["Alice", 30, 20],
    ["Bob", 5, 11],
    ["Cindy", -2, 50],
]
```

list of dict representation



```
[
    {"name": "Alice", "x": 30, "y": 20},
    {"name": "Bob", "x": 5, "y": 11},
    {"name": "Cindy", "x": -2, "y": 50},
]
```

Table Representation

name	x	y
Alice	30	20
Bob	5	11
Cindy	-2	50

list of list representation



```
header = ["name", "x", "y"]
rows = [
    ["Alice", 30, 20],
    ["Bob", 5, 11],
    ["Cindy", -2, 50],
]
```

list of dict representation



```
[
    {"name": "Alice", "x": 30, "y": 20},
    {"name": "Bob", "x": 5, "y": 11},
    {"name": "Cindy", "x": -2, "y": 50},
]
```

`rows[2][header.index("y")]`

Table Representation

name	x	y
Alice	30	20
Bob	5	11
Cindy	-2	50

list of list representation



```
header = ["name", "x", "y"]
rows = [
    ["Alice", 30, 20],
    ["Bob", 5, 11],
    ["Cindy", -2, 50],
]
```

`rows[2][header.index("y")]`

list of dict representation



```
[
    {"name": "Alice", "x": 30, "y": 20},
    {"name": "Bob", "x": 5, "y": 11},
    {"name": "Cindy", "x": -2, "y": 50},
]
```

`rows[2]["y"]`

Demo: Table Transform

Goal: create function that transforms list of lists table to a list of dicts table

Input:

- List of lists (from a CSV)

Output:

- List of dicts

Example:

```
>>> header = ["x", "y"]
>>> rows = [[1,2], [3,4]]
>>> transform(header, rows)
[{"x":1, "y":2}, {"x":3, "y":4}]
```