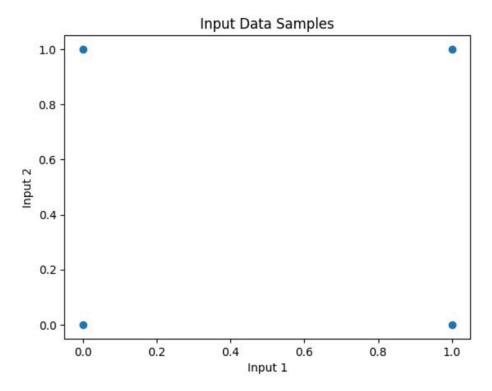


XXXXX

```
import matplotlib.pyplot as plt
#plot
data samples = [(0, 0), (0, 1), (1, 0), (1, 1)]
plt.scatter(*zip(*data_samples))
plt.title('Input Data Samples')
plt.xlabel('Input 1')
plt.ylabel('Input 2')
plt.show()
#AND operation function
def custom_and(x, y):
    return x and y
#OR operation function
def custom or(x, y):
    return x or y
#XOR operation function
def custom_xor(x, y):
     return x != y
#call functions and store results
and results = []
or results = []
xor_results = []
for data in data samples:
    input1, input2 = data
    and_result = custom_and(input1, input2)
    or result = custom or(input1, input2)
    xor result = custom xor(input1, input2)
    and_results.append('True' if and_result else 'False')
or_results.append('True' if or_result else 'False')
    xor_results.append('True' if xor_result else 'False')
#print results
print('AND Results:', and_results)
print('OR Results:', or_results)
print('XOR Results:', xor_results)
```



```
AND Results: ['False', 'False', 'True']
OR Results: ['False', 'True', 'True']
XOR Results: ['False', 'True', 'True', 'False']
```