Secure Multiparty Computation PTFI simple demonstration

Please input bank transaction.

Bank A

Enter numerical value

Bank B

Enter numerical value

Bank C

Enter numerical value

Bank D

Enter numerical value

Output:

- Generates shares:
- Shares used for collaboration
- Reconstructed total transaction balance
- Total transactional balance exceeds/not exceeds the threhold

What is secure multiparty computation?

Secure Multiparty Computation (SMPC) is a technique that allows multiple parties to collaborate on getting a specific output from a function over their individual inputs while maintaining those input in secret and not revealing them.

Explanation of the algorithm (how it protects data?)

Advantages (more to be added)

• **Privacy control:** SMPC methods ensure the data and privacy of participants remain private. It allows the parties to still perform the activity that is required though processing of data with SMPC, while their individual information is kept unrevealed.

Disadvantages (more to be added)

Link to github (code and research report)