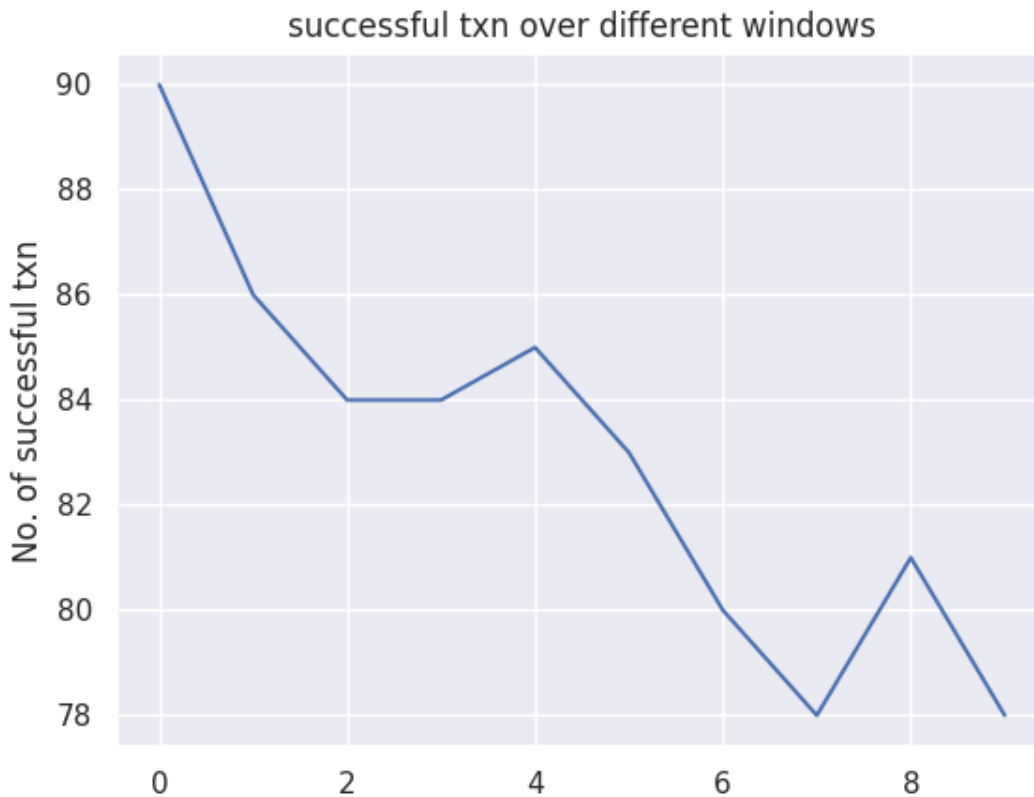# CS765 - HW3 - Dapp on blockchain

We have created the smart contract **Payment.sol** with the following functionalities:
- **registerUser** : to register a user
- **createAcc** : to create an account between two users
- **sendAmount** : to send amount from one user to another
- **closeAccount** : to close the joint account

We have also created separate view functions to verify the success of above functionalities.

In **client.py** we have used the barabasi algorithm to create graphs and called the various contract functions.

Here is the graphical representation:

The reason behind this is that the account balance is decreasing over time on average which can lead to more transaction failure. Also it might be possible that the path didn't exist.