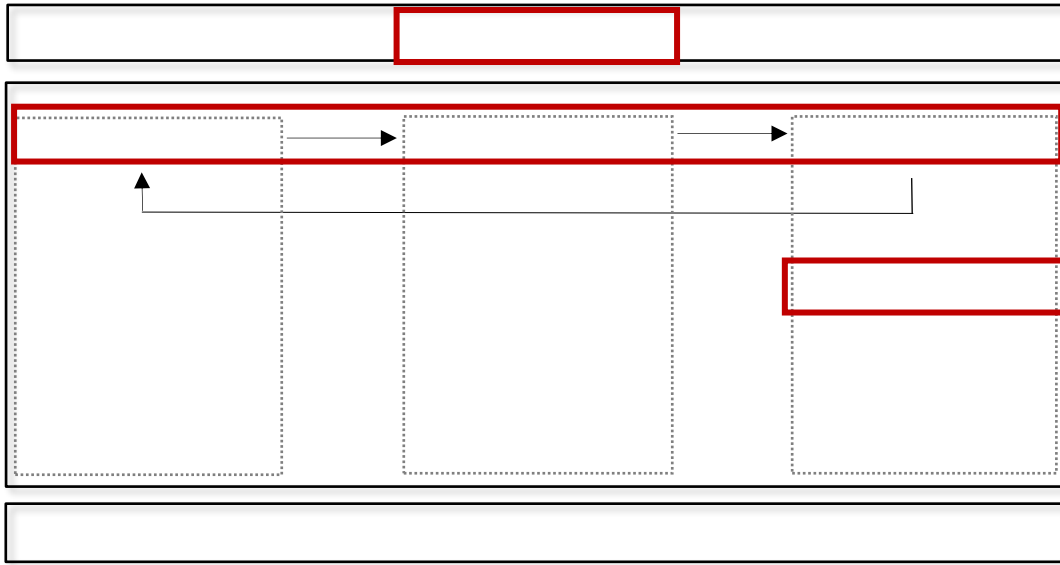


msdeng@mail.gufe.edu.cn

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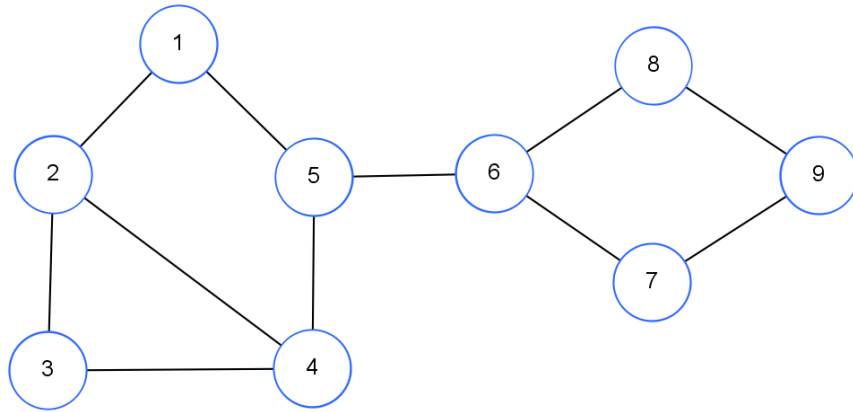
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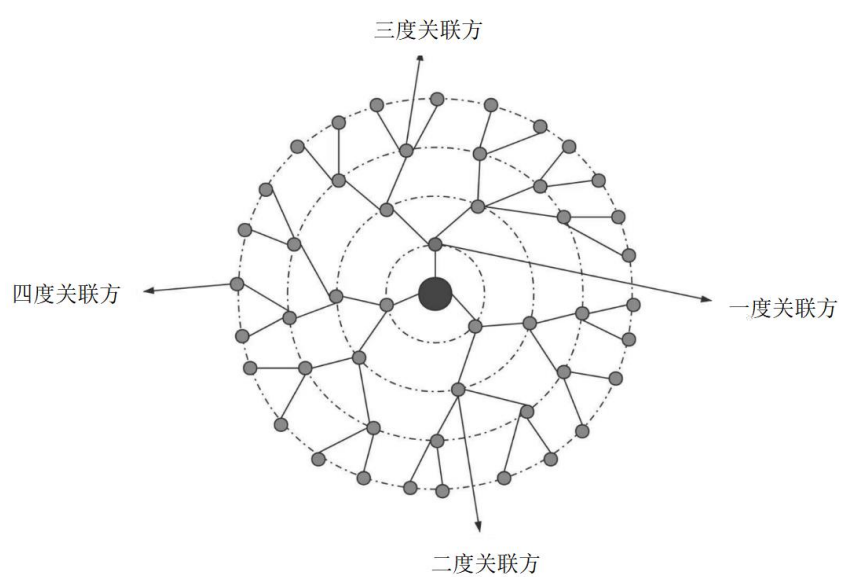
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1 X. Yu, Q. Yang, R. Wang, R. Fang and B . Deng, Data cleaning for personal credit scoring by utilizing social media data: An empirical study, *IEEE Intelligent Systems* 35(2):7-15, 2020.

2 R. B agdalena, Y. Dananjaya, Effect of related-parties transactions to the value of enterprises listed on Indonesian stock exchange. *European Journal of Business and B anagement*, 7(6): 47-57, 2015.

3 J. Yan, F. An, R. Wang, L. Chen, X. Yu, B . Deng, Social network analysis of coauthor networks in inclusive finance in China, Y. Wang et al.(Eds): *Data Science. ICBCSEE 2022, CCIS 1628*, pp.111-122, 2022.

4 G. Yuan, and H. Wang, The general dynamic risk assessment for the enterprise by the hologram approach in financial technology, *International Journal of Financial Engineering*, 6(1):1950001,2019.

5. B Chen, R. Lei, and B . Deng, The influence-maximizing node selection algorithm based on local isolated centrality in large-scale networks implemented by distributed graph computing, 2022 IEEE 24th Int. Conf. on High Performance Computing & Communications, 2022, 1234-1240.