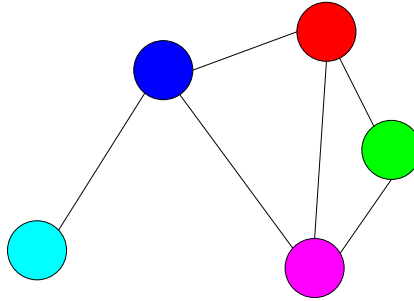
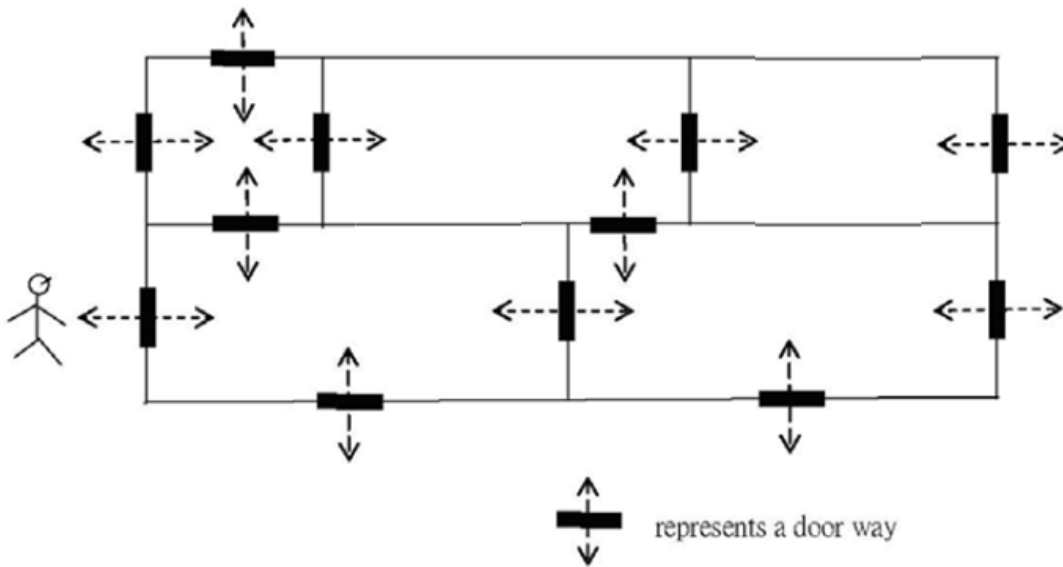


**HOMEWORK PROBLEMS #1**

**1-1** Consider the simple network shown below. Compute its average path length  $L$ , diameter  $D$ , cluster coefficient  $C$ , and average degree  $\langle k \rangle$ .



**1-2** In a laboratory shown by the following figure, can you walk through every door once and once only, and finally return to the starting point? If so, how? If not, why?



**This HW is due in class on Thursday, 14 Sept. 2023**