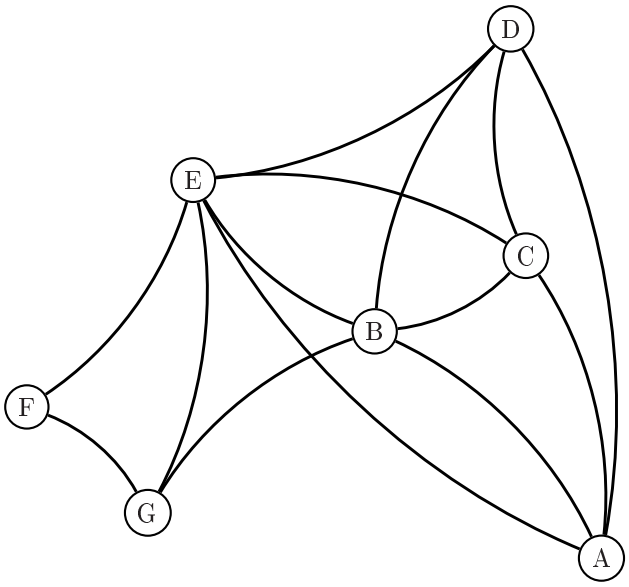
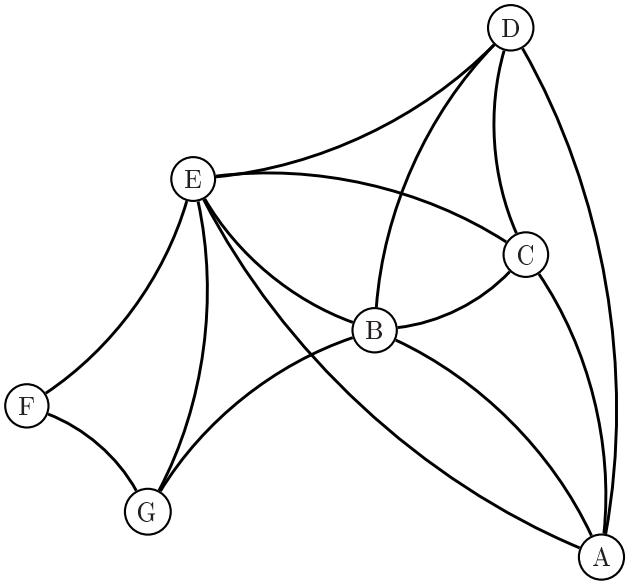
Le problème est de parcourir le graphe en ne passant qu'une fois et une seule par chacune des arrêtes.

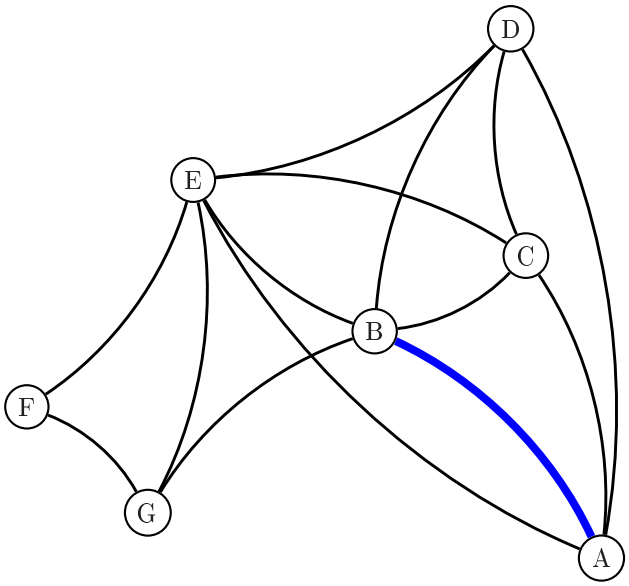
C'est ce qu'on appelle un chemin semi-eulérien.

D'après le cours, pour qu'il existe un tel parcours, il faut et il suffit qu'il n'existe que 0 ou 2 sommets d'ordre impair. Ici, tous les sommets sont d'ordre pair sauf B et G.

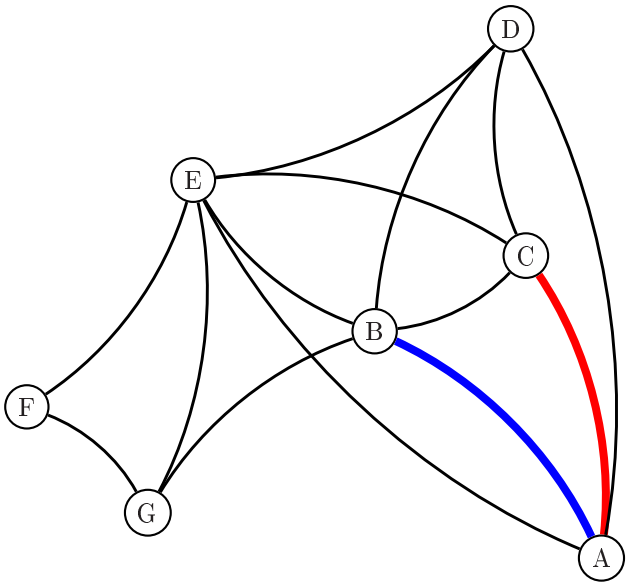
Un tel chemin doit donc commencer en B et finir en G (ou inversement commencer en G et finir en B).
Il suffit de colorier et de noter au fur et à mesure le parcours. Supposons qu'on parte de B...



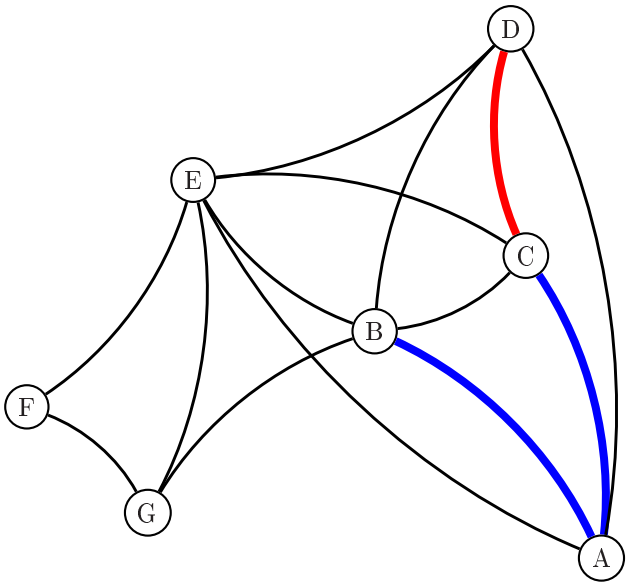

D
E
C
B
F
G
A



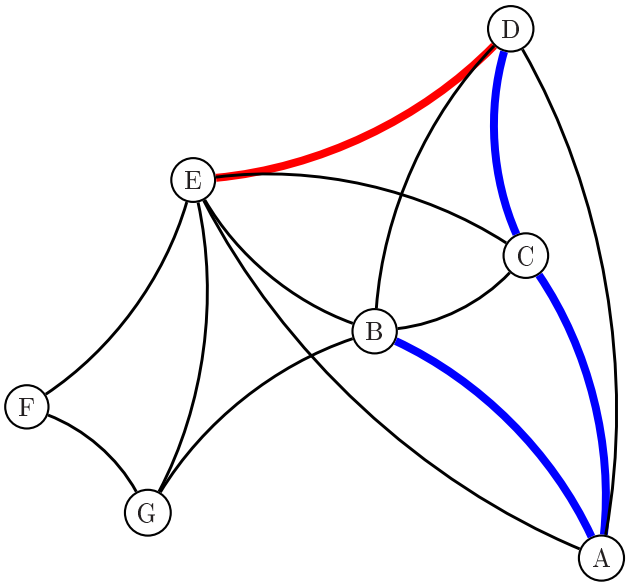
Chemin $B - A$



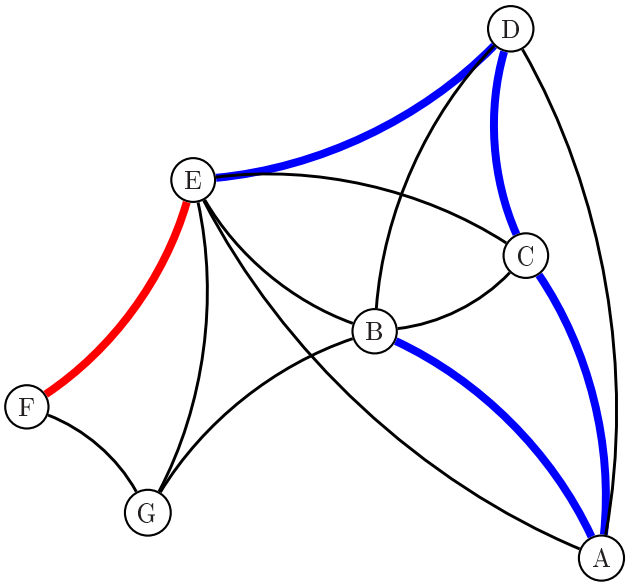
Chemin $B - A - C$



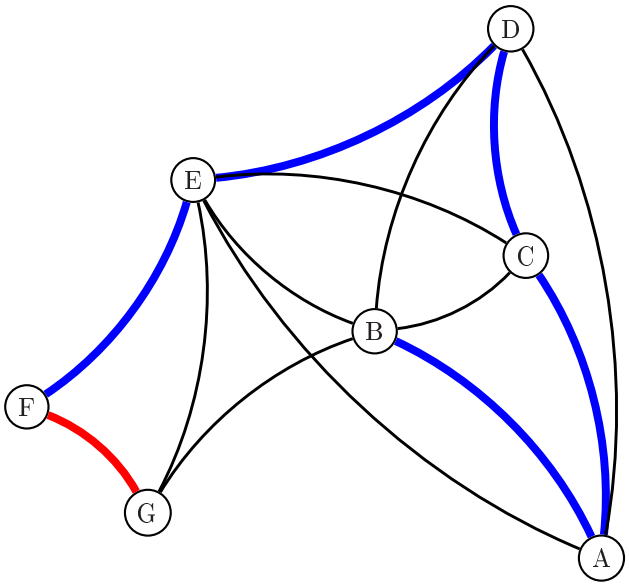
Chemin $B - A - C - D$



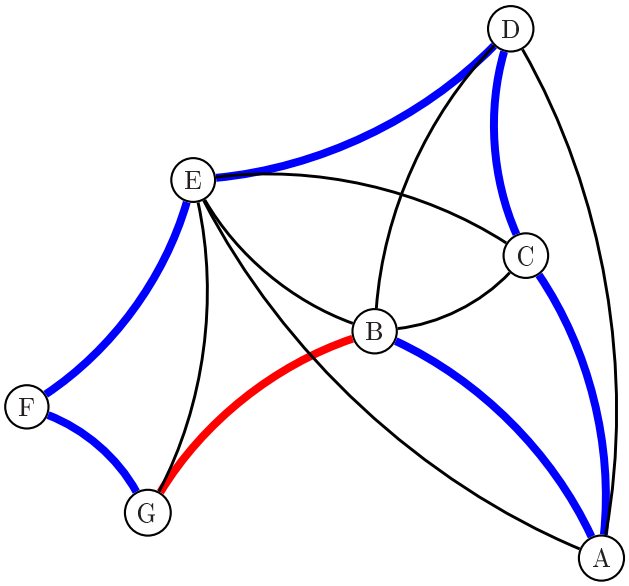
Chemin $B - A - C - D - E$



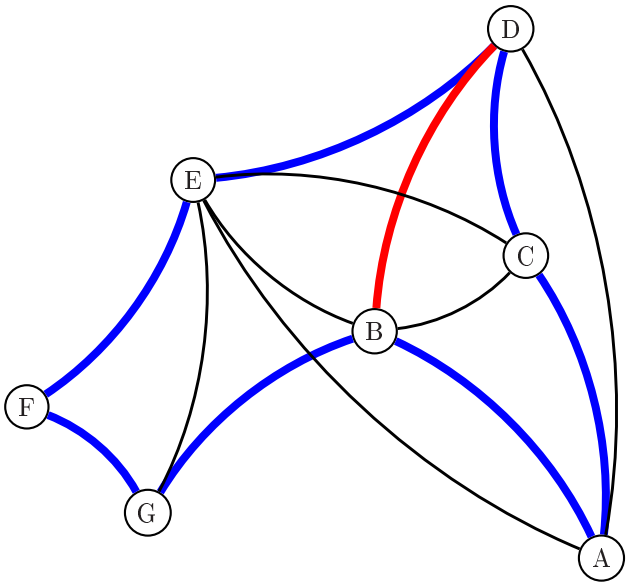
Chemin $B - A - C - D - E - F$



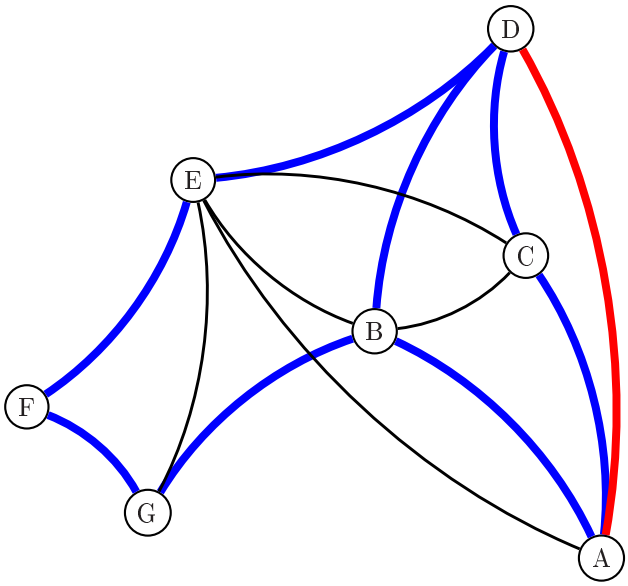
Chemin $B - A - C - D - E - F - G$



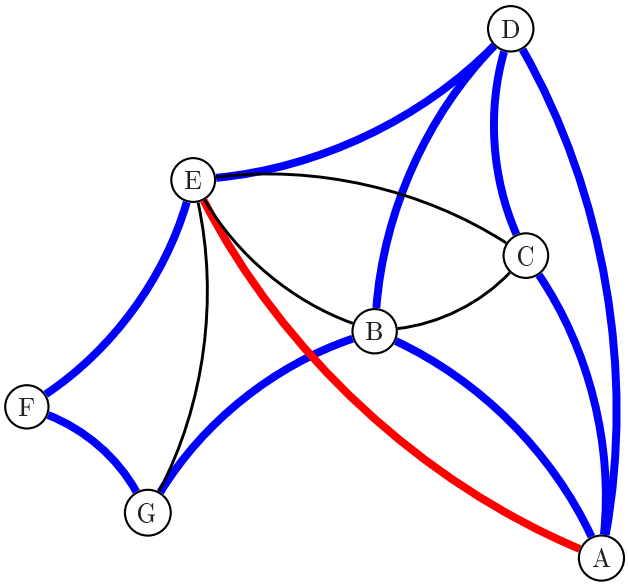
Chemin $B - A - C - D - E - F - G - B$



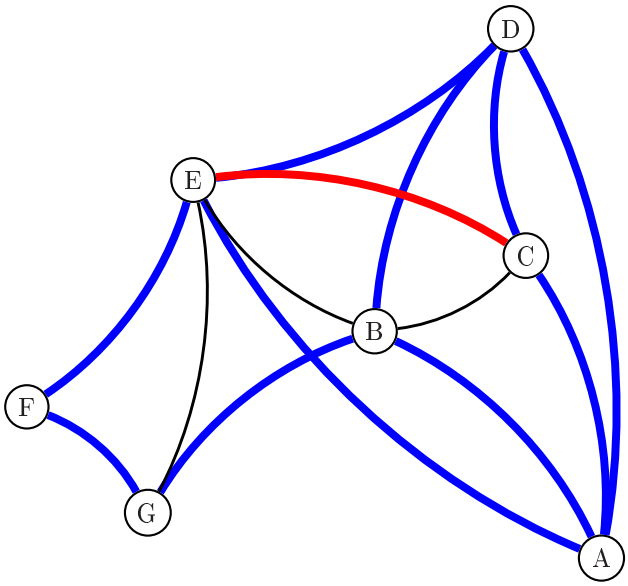
Chemin $B - A - C - D - E - F - G - B - D$



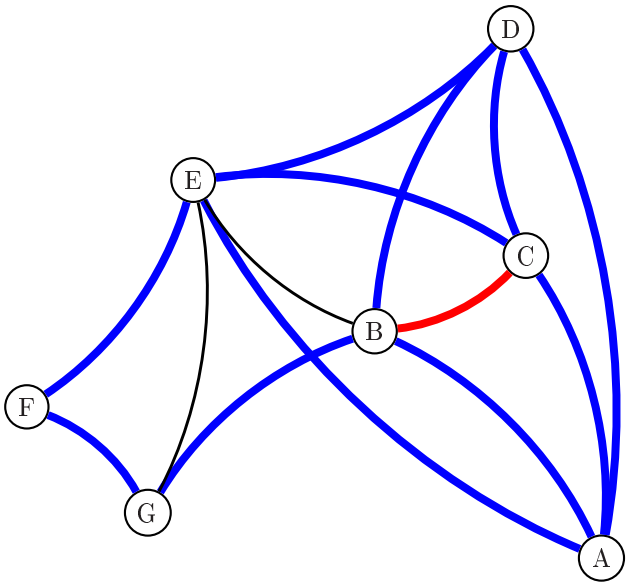
Chemin $B - A - C - D - E - F - G - B - D - A$



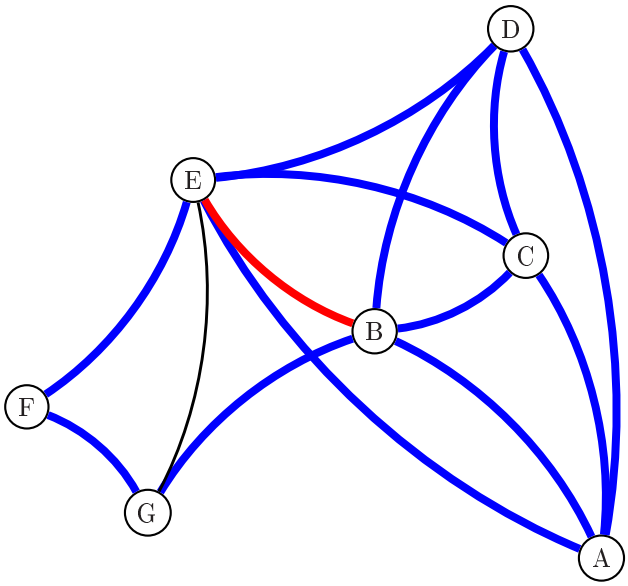
Chemin $B - A - C - D - E - F - G - B - D - A - E$



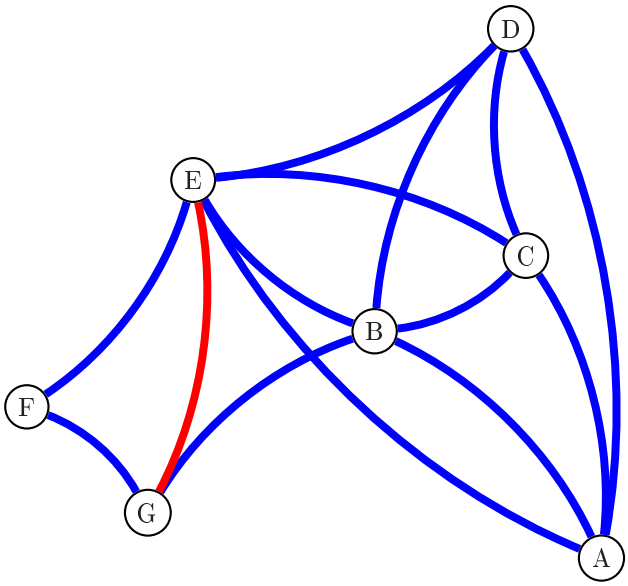
Chemin $B - A - C - D - E - F - G - B - D - A - E - C$



Chemin $B - A - C - D - E - F - G - B - D - A - E - C - B$



Chemin $B - A - C - D - E - F - G - B - D - A - E - C - B - E$



Chemin $B - A - C - D - E - F - G - B - D - A - E - C - B - E - G$