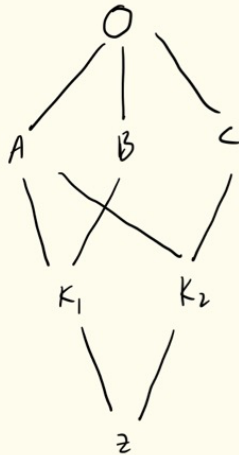


## C3 linearisation

- 定义了在多继承的情况下，一条清晰的搜索正确method的路径。
- 使用merge的方法去找一个类的线性继承路径。

contract z



• 逐层递进，从最简单的开始

$$L[O] = O$$

$$L[A] = AO, L[B] = BO, L[C] = CO$$

$$\begin{aligned}
 L[K_1] &= K_1 + \text{merge}[L[A], L[B], AB] \\
 &= K_1 + \text{merge}[AO, BO, AB] \\
 &= K_1 + A + \text{merge}[O, BO, B] \quad (\text{因为BO的尾部是B}) \\
 &= K_1 + A + B + \text{merge}[O, O] \\
 &= K_1 ABO
 \end{aligned}$$

$$\text{Similarly, } L[K_2] = K_2 ACO$$

Therefore:

$$\begin{aligned}
 L[z] &= z + \text{merge}[L[K_1], L[K_2], K_1 K_2] \\
 &= z + \text{merge}[K_1 ABO, K_2 ACO, K_1 K_2] \\
 &= z + K_1 + \text{merge}[ABO, K_2 ACO, K_2] \quad (A \text{ 是 } K_2 ACO \text{ 的头部，不行}) \\
 &= z + K_1 + K_2 + \text{merge}[ABO, ACO] \\
 &= z + K_1 + K_2 + A + \text{merge}[BO, CO] \\
 &= z + K_1 + K_2 + A + B + \text{merge}[O, CO] \\
 &= z + K_1 + K_2 + A + B + C + O \\
 &= z K_1 K_2 A B C O
 \end{aligned}$$