

E14.c.6 [166] Let be given  $f : [a, b] \to \mathbb{R}$  and a decomposition of [a, b]into intervals  $I_1 = [a, t_1], I_2 = [t_1, t_2], \dots, I_n = [t_{n-1}, b]$  such that the restriction of f on each  $I_k$  is Lipschitz of constant C. Show that f is Lipschitz of constant *C*.

Similarly for Hölder functions.