1052-20-66 **Ilir Snopce*** (snopce@math.binghamton.edu), 191 Main Street Apt. 3R, Binghamton, NY 13905. A question of Iwasawa.

For a finitely generated pro-p group G, let d(G) denote the minimal number of topological generators of G. For a positive integer n, Iwasawa raised the question of determining all pro-p groups G which satisfy the following condition:

$$d(H) - n = [G:H](d(G) - n)$$

for all open subgroups H of G.

In this talk I will answer the question of Iwasawa for pro-p groups of finite rank, provided p > n + 1. If time permits, I will state some results about the question of Iwasawa for pro-p groups of infinite rank. (Received August 18, 2009)