IF $\sum_{i=1}^{n} |x_i| = 0$ & $n = 1$ $\Rightarrow$ $X = \sum_{i=1}^{n} x_i$

THEN $X = x_1 = 0$

NOW IF $n = 2$

THEN $\sum_{i=1}^{2} |x_i| = |x_1| + |x_2|$

& $X = x_1 + x_2 = 0$

NOW IF $n = k+1$ WHERE k IS A POSITIVE INTEGER,

$$\sum_{i=1}^{k+1} |x_i| = |x_1| + |x_2| + \cdots + |x_{k+1}| = \beta$$

& $x = x_1 + x_2 + \cdots + x_{k+1} = \beta$ $\therefore$