Name: Kevin Zhang

$L_1 = \{a^n b^m \mid n \leq m\}$ can be concatenated with $L_2 = \{b\}$ to form $L_3 = \{a^n b^m \mid n < m\}$. By closure properties, L_1 and L_2 are context-free, so L_3 must be as well. A similar argument can be made for $\{a^n b^m \mid n > m\}$, except by concatenating $\{a\}$ instead.