CS-225: Discrete Structures in CS

Week 5-6, Response to Praj - Problem 16

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Response

Proof Variable Mismatch

Your proof states for P(k), but the equivalent statement uses the variable n. And, you constrict the domain using k as well by stating $k \ge 64$. This is a clear mismatch between n and k. The correct format should use n in all circumstances, such as:

 $P(n) \equiv$ a postage of n cents can be formed using just 5-cent and 17-cent stamps, where n is an integer and $n \geq 64$

Other than that, great work! I'd like to point out a similar problem in the textbook, Proposition 5.3.1. They prove P(k+1) in the same style of a postage problem. However, they use weak induction instead of strong induction. May be worth checking out.