
**Abstract:** The article is drafted from the perspective of the marketing manager who must minimize carrying costs of a salesperson that share multiple products. We have tackled this simulation problem using a Hamiltonian cycle associated to transport network conceptual reduced to a graph. Identification of optimal solution was achieved through the implementation of Branch and Bound heuristic algorithm in the C++ programming language. The article is developed on two directions: a conceptual approach to clarify the algorithm used and its source code implementation.

**Keywords:** critical path, optimal transport problems, Branch and Bound algorithm, Hamiltonian cycle, marketing simulation

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