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### Application of Graph Theoretic Approach in Selection of a Car

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**Abstract:**The present day automotive industry is a buyers' market. The process of buying a car has transformed into a problem of buying a car. The proposed study develops a framework for selection of car using Graph theory matrix approach. The selection of attributes and sub attributes were done based on literature review and experts opinion. The attributes digraph was developed and the same was represented in matrix form. The permanent function was used to find the Index score. The option with most elevated index score was observed to be the best option. This methodology will help any individual without much technical knowledge in selecting a car.

**Keywords:**Graph theoretic approach – Digraph - Permanent function - Index score.

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