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## Social Network community detection algorithm design report

MINF 2019 - Bordeaux Master Computer Science

## Section 1: Experimental Results

Fill the following table with appropriate information.

Methods	Graph Size	ExecutionTime in seconds	Communities
Conventional method:			
Hierarchical clustering			
Heuristic Method: Random walks			

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## Section 2: The heuristic approach: Random walk algorithm

In order to group the vertices into communities, we will now introduce a distance r between the vertices that captures the community structure of the graph. This distance must be large if the two vertices are in different communities, and on the contrary if they are in the same community it must be small. It will be computed from the information given by random walks in the graph.