

Matroids have now been shown to be a hereditary set-system which naturally works well with the greedy algorithm, guaranteeing optimal solution to optimisation problems. We have also seen in *theorem 5.6* that matroids are the only hereditary set-system that have this property. But what about non-hereditary set-systems? Are there other systems that yield optimal solutions to optimisation problems by way of the greedy algorithm? and if so how much structure must be imposed on the set-systems to guarantee this property? These are the questions we try to explore using Jungnickel's text.[?] In this section, proofs are omitted as they are in the text. For proofs or further investigation, refer to [?], [?], [?].