

Greedy Alg

- Create soln 1 piece at a time
- To figure out which piece to add next, calculate $f(i)$ for all i , & choose i with largest f .

Examples

- Dijkstra
- Scheduling

• Proof Strategies

- Loop Invariant (Dijkstra)

- Exchange

- Let σ be greedy strategy
- Suppose for contradiction $\sigma^* \neq \sigma$ is optimal
- Show can alter σ^* (by making more like greedy) to get better strategy.