

## SUBMODULAR FUNCTIONS

## Why

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## **Definition**

Let X a finite nonempty set. A function  $f: \mathcal{P}(X) \to \mathbf{R}$  is submodular if

$$f(S \cup T) + f(S \cap T) \le f(S) + f(T)$$

for all  $S, T \subset X$ .

 $<sup>^1{\</sup>rm Future}$  editions will include. The discussion will likely be genetic, through combinatorial optimization.

