A language provides an abstract view of machine.

The right language can make a problem easy; the wrong language can make a problem hard.

Language design is full of tradeoffs
- expressiveness
- efficiency
- portability
- extensibility
- type safety

Language design is full of tradeoffs
- Be consistent
- Remember intended domain
Objectives

Understand how programming languages work

Understand how to choose the right language

Appreciate tradeoffs in language design

Readily Understand:
new languages
analysis tools
implementation costs
program efficiency
program development
basic design principles

Reflect on how you work
Find the right tool for the job
Or invent it!