Reasons to use Selection

* Selection is used to control data flow
* Four major ways selection is used:
  + **Select a particular** value or kind of value from a data flow (all debits or credits, for instance)
  + **Selectively update** a counter or accumulator ( counting vowels and consonants)
  + **Route data** to the correct part of a program in response to user commands (menus)
  + **Error check** data; making sure it falls within boundaries or correcting it

Three different kinds of decisions

* Three different selection techniques
  + **Sequential if: related** comparison sequence
  + **Nested if: levels** of decision making
  + The **switch:** “numbered” branches
* Not just “different ways to do the same thing”
* What you should be aiming for:
  + #1: produce the correct output
  + #2: understandable, maintainable code
  + #3: use the correct semantics
  + #4: write efficient code