Useful functions

Push

- push ➔ add values to an array
  - push @array 5;
    – adds 5 to end of @array
  - push @foo (4, 3, 2);
    – adds 4, 3, and 2, to the end of @foo
  - @a = (1, 2, 3); @b = (10, 11, 12);
  - push @a @b;
    – @a now ➔ (1, 2, 3, 10, 11, 12)

Pop

- removes last element of array, and returns it
  - @array = (1, 5, 10, 20);
  - $last = pop @array;
    – $last contains value 20
    – @array contains (1, 5, 10)
  - @empty = ();
  - $value = pop @empty;
    – $value gets undef.
shift
• analogous to popping from beginning
• @array = (1, 5, 10, 20);
• $first = shift @array;
  – $first contains value 1
  – @array contains (5, 10, 20);
• @empty = ();
• $value = shift @empty;
  – $value gets undef

unshift
• analogous to pushing at beginning
• unshift @array 5;
  – adds 5 to front of @array
• unshift @foo (4, 3, 2);
  – adds 4, 3, and 2, to the front of @foo
• @a = (1, 2, 3); @b = (10, 11, 12);
• unshift @a @b;
  – @a now ➔ (10, 11, 12, 1, 2, 3)

splice
• all functionality of push, pop, shift, unshift
  – (plus a little bit more)
• Formally:
  – splice ARRAY, OFFSET, LENGTH, LIST
• remove LENGTH elements from ARRAY, starting at OFFSET, and replace them with LIST.
• In scalar context, return last element removed
• In list context, return elements removed
splice w/o some arguments

- splice ARRAY, OFFSET, LENGTH, LIST
- Omit LIST: remove elements, don’t replace
- Omit LENGTH: remove all elements starting at OFFSET
- Omit OFFSET: clear entire ARRAY as it’s being read

splice equivalencies

- splice ARRAY, OFFSET, LENGTH, LIST
- push @a ($x, $y);
  - splice (@a, @a, 0, $x, $y);
- pop @a;
  - splice (@a, $#a);
  - splice (@a, $#a);
- shift @a;
  - splice (@a, @a, -1);
- unshift @a ($x, $y);
  - splice (@a, 0, 0, $x, $y);
- $a[$x] = $y;
  - splice (@a, @a, 0, 0, $x, $y);

keys, values

- keys ➔ get list of all keys from a hash
  - seemingly random order (kind of)
- values ➔ get list of all values from a hash
  - same ‘random’ order as keys produces
- keys (%months) == (‘Jan’, ‘Feb’, ‘Mar’, ...)
- values (%months) == (‘January’, ‘February’, ‘March’, ...)
  - NOT necessarily in that order.