## **Substitutions**

```
$ cat spell.sed # sed script to spell-out digits
#!/usr/bin/sed -f
s/0/zero /g
s/1/one /g
s/2/two /g
s/3/three /g
s/4/four /g
s/5/five /q
s/6/six /g
s/7/seven /g
s/8/eight /g
s/9/nine /g
$ echo '2^40' | bc # Raise 2 to the 40th power
1099511627776
$ echo '2^40' | bc | ./spell.sed # Spell-out the result
one zero nine nine five one one six two seven seven seven six
```

## **Add lines**

```
$ cat >tojson.sed <<\EOF</pre>
> #!/usr/bin/sed -f
> # Insert [ at the beginning
> 1i\
> [
> s/.*/ "&",/ # Convert lines into strings
> # Append ] at the end
> $a\
> ]
> E0F
$ chmod +x tojson.sed # Make script executable
$ ls /usr | ./tojson.sed # Convert output of ls into JSON
[
  "bin",
  "include",
  "lib",
  "lib32",
  "libdata",
  "libexec",
  "local",
  "obj",
  "ports",
  "sbin",
  "share",
  "src",
1
$
```

## **Branch**

```
$ cat text
As an ortho-
graphic con-
cept, the hy-
phen is a sin-
gle entity. In
terms of char-
acter encoding
and display,
that entity is
```

```
represented
by any of sev-
eral characters
and glyphs.
$ cat >unhyphen.sed <<\EOF</pre>
> #!/usr/bin/sed -f
> # Join hyphenated lines
> :redo # Label
> /-$/ {
                       # Lines ending with hyphen
                       # Merge next line
>
          s/-\n// # Substitute the hyphen and the newline
b redo # Jump to the redo label
>
>
> }
> E0F
$ chmod +x unhyphen.sed # Make sed script executable
$ ./unhyphen.sed <text # Run script on the text document
As an orthographic concept, the hyphen is a single entity. In
terms of character encoding
and display,
that entity is
represented
by any of several characters
and glyphs.
$ ./unhyphen.sed <text | fmt # Remove hyphens and reformat</pre>
As an orthographic concept, the hyphen is a single entity. In terms of
character encoding and display, that entity is represented by any of
several characters and glyphs.
```