

```
size_t strlen(const char *s)
{
    size_t n = 0;

    for (; *s != '\0'; s++)
        n++;
    return n;
}
```

Next, we notice that the condition `*s != '\0'` is the same as `*s != 0`, because the integer value of the null character is 0. But testing `*s != 0` is the same as testing `*s`; both are true if `*s` isn't equal to 0. These observations lead to our next version of `strlen`:

```
size_t strlen(const char *s)
{
    size_t n = 0;

    for (; *s; s++)
        n++;
    return n;
}
```

But, as we saw in Section 12.2, it's possible to increment `s` and test `*s` in the same expression:

```
size_t strlen(const char *s)
{
    size_t n = 0;

    for (; *s++;)
        n++;
    return n;
}
```

Replacing the `for` statement with a `while` statement, we arrive at the following version of `strlen`:

```
size_t strlen(const char *s)
{
    size_t n = 0;

    while (*s++)
        n++;
    return n;
}
```

Although we've condensed `strlen` quite a bit, it's likely that we haven't increased its speed. Here's a version that *does* run faster, at least with some compilers:

```
size_t strlen(const char *s)
{
    const char *p = s;
```