Example Use of String Comparison Code

What is printed by the code below?

```
char* w = "word1";
char* x = "word2";
printf ("%d\n",
        string_equal (w, x));
printf ("%s %s\n", w, x);
```

First, let's execute the function.

Execution Example for String Comparison

```
while ('\0' != *s1) {
    if (*s1 != *s2) { return 0; }
    s1++; s2++;
}
return ('\0' == *s2);
```

s1

Where does s1 start?

Where does s2 start?

```
char* w = "word1";
char* x = "word2";
```

s2

Execute Loop and If Statement Tests

```
while ('\0' != *s1) {
    if (*s1 != *s2) { return 0; }
    s1++; s2++;
}
return ('\0' == *s2);
```

s1

What is *s1? 'w' (not NUL)

```
char* w = "word1";
char* x = "word2";
```

What is *s2?

also 'w' (don't return 0)

s2

Advance **s1** and **s2** to Point to Next Characters

```
while ('\0' != *s1) {
    if (*s1 != *s2) { return 0; }
    s1++; s2++;
}
return ('\0' == *s2);
```

s1

Advance s1.

```
char* w = "word1";
char* x = "word2";
```

And advance s2.

s2

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