

#### REPLACE in section 2.6

A string literal can be assigned to an **integral type**-character, or a packed array, as in Verilog-2001.

A string literal can be assigned to an unpacked array of **bytes**-characters, and a zero-termination is added like in C.

#### REPLACE in section 3.7

SystemVerilog includes a string data type, which is a variable size, dynamically allocated array of **byte**-characters. SystemVerilog also includes a number of special methods to work with strings.

Verilog supports string literals, but only at the lexical level. In Verilog, string literals behave like packed arrays **integral values** of a width that is a multiple of 8 bits. A string literal assigned to an **integral variable** packed array is of a different size is either truncated to the size of the array variable or padded with zeroes to the left as necessary.

....

When using the string data type instead of an **integral variable** packed array,

....

A string literal can be assigned to a string, a character, or a packed array or an **integral type**.

...

A string, string literal, or packed array **integral value** can be assigned to a string variable. The string variable shall grow to accommodate the packed array **integral value**. If the size (in bits) of the packed array **integral value** is not a multiple of 8, then the packed array **integral value** is zero-filled on the left padded with zeroes to the left as necessary.

Add to the examples in section 3.7

```
a = {"Hi",b}; // OK
r = {"H",""}; // yields "H\0" "" is converted to 8'b0
b = {"H",""}; // yields "H" "" is the empty string
a[0] = "h"; // OK same as a[0] = "hi" }
```

#### REPLACE in table 3-2

The comparison behaves like the ANSI C `strcmp` function (or the ~~compare~~ **compare** string method) **except that embedded null bytes are included**.

Comparison. Relational operators return 1 if the corresponding condition is true using the lexicographical ordering of the two strings `Str1` and `Str2`. The comparison behaves like the ANSI C `strcmp` function (or the ~~compare~~ **compare** string method) **with regard to the lexical ordering**. Both operands can be of type **string**, or one of them can be a string literal.

#### REPLACE in section 3.7.6

— `str.compare(s)` compares `str` and `s`, as in the ANSI C `strcmp` function (**with regard to lexical ordering and return value**), ~~with a compatible return value~~ and embedded null bytes are included.

#### REPLACE in section 3.7.7

— `str.icompare(s)` compares `str` and `s`, like the ANSI C `strcmp` function (**with regard to lexical ordering and return value**), ~~with a compatible return value~~, but the comparison is case insensitive and embedded null bytes are included.

#### RELACE in section 23.4

The `$bits` system function returns **logic X'x0** when called with a dynamically sized type that is currently empty.