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Linux / UNIX: Convert Hexadecimal to Decimal Number

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How do I convert hex number to decimal number using a shell script under UNIX / Linux operating systems?

Hexadecimal (hex) is a numeral system with a radix, or base, of 16. It uses sixteen distinct symbols, most often the symbols 0–9 to represent values zero to nine, and A, B, C, D, E, F (or a through f) to represent values ten to fifteen.



[1]

bc - An arbitrary precision calculator language

There is no need to write a shell script. You can simply use the following syntax at a shell prompt to convert hex to decimal number or vice versa:

```
echo "obase=16; hex-number" | bc
echo "obase=16; 100" | bc
```

Sample output:

```
64
```

```
echo "obase=10; decimal-number" | bc
echo "obase=10; AC" | bc
```

Sample output:

```
99
```

ibase and obase define the conversion base for input and output numbers under bc. The default for both input and output is base 10. Add following function to your ~/.bashrc:

```
h2d() {
    echo "obase=16; $" | bc
}
d2h() {
    echo "obase=10; $" | bc
}
```

The above two functions can be used from the command line as follows:

```
$ h2d 100
$ d2h AC
```

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