

Beginning Perl Programming (X52.9543.001)**An Implementation of Homework 1**

Here's **one** implementation of Homework #1. The **bold** items highlight changes/improvements from muni1.pl:

muni2.pl

```
#!/App/Perl/bin/perl -w
#
# muni2.pl
#
# Perl script to take a person's tax bracket and the interest rate on a
# tax-free bond, and calculate the equivalent taxable rate.
# Interacts on STDIN and writes to STDOUT.
#
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print "What is your tax bracket (example 39.6 for 39.6% tax bracket)? ";
$taxBracket = <STDIN>;
chomp ($taxBracket);

print "Enter a tax-free interest rate (example 4.3 for 4.3%): ";
$taxFreeRate = <STDIN>;
chomp ($taxFreeRate);
print "\n";

# TBD: improve checking for bad input!

if ($taxBracket <= 0) { die "Sorry, your tax bracket is out of range."; }
if ($taxFreeRate <= 0) { die "Sorry, your interest rate is not in range."; }

# Formula: taxable = taxfree / (1-taxBracket)
#
# Note that factors of 100 are required in our calc because our rates
# are 100 times larger (our are in the range 0..100 rather than 0..1).

$taxableRate = ($taxFreeRate / (100 - $taxBracket)) * 100;

printf "A tax-free bond which yields %0.2f%% interest is equivalent to\n",
    $taxFreeRate;
printf "a taxable bond which yields %0.2f%% interest.\n",
    $taxableRate;
```