**CS 3421 Week 7 Problems: Perl**

**1.** Using Perl, create an array of numbers 1 through 5, then print the first and third elements to stdout followed by the total number of elements in the array.

#!/usr/bin/perl –w  
use strict;  
  
my @array = (1..5);

print “$array[0]\n”;  
print “$array[2]\n”;  
my $number = $#array + 1;  
print “$number\n”;

**2.** Using Perl, given an arbitrary number of arguments, print each argument that corresponds to an existing directory followed by the contents of the directory.

#!/usr/bin/perl –w  
use strict;  
  
foreach my $arg (@ARGV)  
{  
 if ( -d $arg ) # -d checks if it’s a directory or not  
 {  
 print “$arg\n”;  
 print `ls $arg`;  
 }  
}

**3.** Using Perl, assign the first three arguments to variables $a, $b, and $c (given an arbitrary number of arguments greater than or equal to two). For each variable, print “$a = [value]” to stdout using the actual variable name and value. Also validate that *at least* three arguments are passed.

#!/usr/bin/perl –w  
use strict;  
  
if (@ARGV < 3)  
{  
 die “Must have at least 3 arguments”;  
}  
  
my $a;  
my $b;  
my $c;  
($a, $b, $c) = @ARGV;  
print “\$a = $a”;  
print “\$b = $b”;  
print “\$c = $c”;

**4.** Using Perl, create a script which prompts the user for their age and calculates the year they were born and prints “You were born in [birthyear]” to stdout. Use the **date** utility with the correct format code to produce the current year.

#!/usr/bin/perl –w  
use strict;  
  
my $year = `date +”%Y”; # calling unix utility date from cmd line  
print “Enter your age: “;  
my $age = <STDIN>;  
my $birthyear = $year - $age;  
print “You were born in $birthyear\n”;

**5.** Create a Perl script, which reads a file’s contents line by line and prints the line number of the *first occurrence* of the line “findme” (the entire line should only contain the string “findme”).

#!/usr/bin/perl –w  
use strict;  
  
open(INFILE, “<”, $ARGV[0]) or die “Could not open file $ARGV[0]”;  
  
my $count = 1;  
my $line;  
  
while($line = <INFILE>)  
{  
 chomp($line);  
 if($line eq “findme”)  
 {  
 print “Found on line $count\n”;  
 last; # break  
 }  
 $count++;  
}