#### 课程作业2

1. 写一个名为“foreachIf.pl”的perl 程序，用foreach和if语句统计以下数组元数 中A、C、G、T的个数。 @bases = ('A','C','G','T','C','G','C','G','T','T','C','G','T','C','G','T','C','G','C','G','T','T','C','G','T');

输出每个碱基的数目。

代码：

use strict;

use warnings;

my@bases = ('A','C','G','T','C','G','C','G','T','T','C','G','T','C','G','T','C','G','C','G','T','T','C','G','T');

my $i =0;

my $m =0;

my $l =0;

my $g =0;

foreach my $a (@bases)

{

if ($a eq 'A' )

{

$i++;

}

if ($a eq 'C')

{

$m++;

}

if ($a eq 'G')

{

$g++;

}

if ($a eq 'T')

{

$l++;

}

}

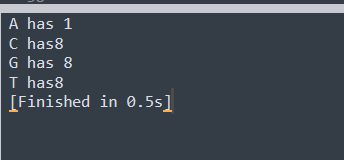
print "A has " ,$i, "\n";

print "C has", $m, "\n";

print "G has " ,$g, "\n";

print "T has", $l, "\n";

结果：



1. 写一个名为“whileIf.pl”的perl 程序，用while和if语句把数组中的起始密码子 （“AUG”）找到，输出它在数组中的位置。 已知一个包含10个元素的数组： @geneticCodes = （“UUU”, “CUU”, “AUU”, “GUC”, “CCA”, “AUG”, “GCG”, “UAG”, “AAG”, “GGA”）；

use strict;

use warnings;

my @geneticCodes =("UUU", "CUU", "AUU", "GUC", "CCA", "AUG","GCG","UAG","AAG","GGA");

my $i=0;

my $total=scalar @geneticCodes;

while ($i < $total)

{ $i++;

my $a= $geneticCodes[$i];

if ( $a eq "AUG")

{

print $i+1,"\n";

}

}

&findCode(@geneticCodes);