

CS 5045 – Computation for the Life Sciences

Fall 2003

Homework 02

September 1, 2003

Problem 1

Consider the following (part of a) Perl program

```
@movies = ('Casablanca', 'Star Wars', 'ET', 'Home Alone');  
$movie = pop(@movies);  
push(@movies, $movie);  
$movie = pop(@movies);  
$movie = pop(@movies);  
push(@movies, $movie);  
$movie = pop(@movies);
```

What is the value of \$movie?

Problem 2

Write a Perl program that reads a DNA string from a file (containing a single line with the string). The DNA sequence can contain both upper and lower case letters. Print the DNA sequence with only lowercase letters (acgt), and print it again with only uppercase letters (ACGT). Use `tr///`.