

1.0.1.8 Introduction to Perl

Midterm Self-Examination[†]

1. What do the strings \$, @ and % in front of variable signify?
2. What is the difference between q() and qq()?
3. Explain why an array element is written as \$array[0] and not @array[0].
4. What is the difference between \$x = \$#array and \$x = @array?
5. What is the order of hash keys returned by the “keys” function?
6. What does the following script produce?

```
@x = (1..100);
@y = ();
for (@x) {
    push @y, rand();
}
$z = 0;
for $y (sort {$b <=> $a} @y) {
    $z = $z+$y;
    print qq($y $z);
}
```

7. Given an array @array, write a script to print all the unique elements in the array? (*hint: use a property of hash keys*)
8. Write a script that does the following. First, it creates 10,000 random sequences, with each sequence having a random length from 20 to 25. Then, it prints the sequences ordered by GC content (i.e. sequences with highest numbers of g's and c's come first). (*hint: consider storing GC content in a hash*)
9. What do you like about Perl? What do you not like?

[†]examine and answer the questions, not yourself; you do not need to hand your work in; answer sheet will be provided next week