

Bio 720 - Assignment 04

Lucy Zhang

October 9, 2018

EMAIL ▾	NAME ▾	COURSES COMPLETED ▾	CHAPTERS COMPLETED ▾	XP POINTS ▾
 zhangsj3@mcmaster.ca	Lucy Zhang	1	5	3380

1.

2. The pattern matches to the subdivisions of 4 digits in the text.

3.

- (a) `'\bis\b'` what is it
- (b) `'\Bis\B'` thistle
- (c) `'\bis\B'` istanbul
- (d) `'\Bis\b'` confutatis

4.

- (a) `'e(.*?)e'` exasperate
- (b) `'e(.*?)e'` Nothing

5. `rev sequence | tr ATCG TAGC`

6. `let var=$2-$1;`
`head -n $2 $3 | tail -n $var;`

7. `let num=0;`
`myNums=("$@");`
`for arg; do`
 `let num=$(($num+$arg));`
`done`
`echo $num;`

Usage:

```
$ adder.sh 1 3 4 46 7 8 9
78
```

8. `while read line; do`
 `echo -ne "$line\n\n";`
`done < $1`

9. (a) `wget -q0 - ftp://ftp.ncbi.nlm.nih.gov/genomes/refseq/bacteria/Escherichia_coli/`
 `latest_assembly_versions/GCF_003009135.1_ASM300913v1/GCF_003009135.1_ASM300913v1_`
 `protein.faa.gz | gunzip -c | grep "periplasmic nitrate reductase"`

(b) `wget -q0 - $1 | gunzip -c | grep $2`

10. No, the line `read number` catches the number piped from `echo` as standard input.