

Shell Topic 03: For Loops

Note 1. The shell is a fully fledged programming environment with all of the procedural constructs that you are familiar with. For loops have subtle interactions with the `$` operator and various types of quotation marks.

Problem 2. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ for file in a b c d e f; do touch $file; done
3 $ ls | wc -l
```

Fraction of LLMs with correct answer: $16 / 19 = 0.84$

Problem 3. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ for file in 'a b' 'c d' 'e f'; do touch $file; done
3 $ ls | wc -l
```

Fraction of LLMs with correct answer: $8 / 19 = 0.42$

Problem 4. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ for file in 'a b' 'c d' 'e f'; do touch "$file"; done
3 $ ls | wc -l
```

Fraction of LLMs with correct answer: $10 / 19 = 0.53$

Problem 5. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ for file in 'a b' 'c d' 'e f'; do touch '$file'; done
3 $ ls | wc -l
```

Fraction of LLMs with correct answer: $3 / 19 = 0.16$

Problem 6. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ for file in a b c $(echo hello world) d e f; do touch "$file"; done
3 $ ls | wc -l
```

Fraction of LLMs with correct answer: $5 / 19 = 0.26$

Problem 7. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ for file in 'a b' 'c' $(echo hello world) d' 'e f'; do touch "$file"; done
3 $ ls | wc -l
```

Fraction of LLMs with correct answer: $11 / 19 = 0.58$

Problem 8. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ for file in "a b" "c" $(echo hello world) d" "e f"; do touch "$file"; done
3 $ ls | wc -l
```

Fraction of LLMs with correct answer: $8 / 19 = 0.42$

Problem 9. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ for file in "a b" "c" $(echo hello world) d" "e f"; do touch $file; done
3 $ ls | wc -l
```

Fraction of LLMs with correct answer: $2 / 19 = 0.11$

LLM Model Performance

