Shell Review Quiz

Total Score: /2^4

Printed Name:

Quiz rules:

1. You MAY use any printed or handwritten notes.

2. You MAY NOT use a computer or any other electronic device.

Problem 1. Write the output of the final command in the following shell script.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ message="hello world"
3 $ cat > 'quiz.py' <<'EOF'
4 import os
5 print(os.getenv('message', "$message"))
6 EOF
7 $ python3 quiz.py
```

Fraction of LLMs with correct answer: 1 / 19 = 0.05

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

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ message="hello world"
3 $ message="salve munde" touch test
4 $ cat > "quiz.sh" <<EOF
5 export message='hola mundo'
6 EOF
7 $ . quiz.sh
8 $ echo "$message"
```

Fraction of LLMs with correct answer: 0 / 19 = 0.00

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

```
1  $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ git init
3  $ echo "print('hello world')" >> foo.py
4  $ echo 'print("hola mundo")' >> bar.py
5  $ git add bar?py
6  $ git commit -m "first commit"
7  $ git branch foo
8  $ git checkout foo
9  $ echo "print('hello again')" >> bar.py
10 $ git add *.py
11 $ git commit -m "second commit"
12 $ git checkout master
13 $ echo "print('hola otra vez')" > bar.py
14 $ python3 bar.py
```

Fraction of LLMs with correct answer: 17 / 19 = 0.89

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

```
1  $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ touch hello world
3  $ touch 'hola mundo'
4  $ touch salve munde
5  $ for i in $(ls); do echo '$i'; done | wc -l
```

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

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

```
1  $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ mkdir -- -a
3  $ echo evil > -a/evil
4  $ ls *
```

Fraction of LLMs with correct answer: 1 / 19 = 0.05

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

```
1  $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ git init
3  $ mkdir test
4  $ touch 'test/hola mundo'
5  $ touch test/hello world
6  $ touch test/'.salve .munde'
7  $ cd test
8  $ for i in *; do git add $i; done
9  $ git commit -m 'first commit'
10 $ git checkout -b foo
11 $ git add .
12 $ git commit -m 'second commit'
13 $ git checkout master
14 $ ls -a
```

Fraction of LLMs with correct answer: 0 / 19 = 0.00

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

```
1  $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ foo='hello'
3  $ ! [ "$foo" = 'hello' ] && echo $foo > foo
4  $ ls | wc -l
```

Fraction of LLMs with correct answer: 6 / 19 = 0.32

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

```
1  $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ cat > logs <<EOF
3  INFO: blah
4  INFO: blah
5  WARNING: blah blah blah
6  INFO: blah
7  EOF
8  $ cat logs | grep 'INFO' || echo 'hello world' > foo
9  $ ls
```

Fraction of LLMs with correct answer: 6 / 19 = 0.32

LLM Model Performance

Model	Score (%)
openrouter-meta-llama-llama-3.1-405b-instruct	25
openrouter-deepseek-deepseek-r1:free	12
o1-preview	38
o1-mini	38
groq-llama-3.3-70b	50
groq-deepseek-r1-distill-llama-70b	0
gpt-4o-mini	12
gpt-4o	12
gpt-4-turbo	25
gpt-4	38
gemini-exp-1206	12
gemini-2.0-flash-exp	25
gemini-1.5-flash-8b-001	25
gemini-1.5-flash-001	25
claude-3-sonnet-20240229	25
claude-3-opus-20240229	25
claude-3-haiku-20240307	25
claude-3-5-sonnet-20241022	25
claude-3-5-haiku-latest	12