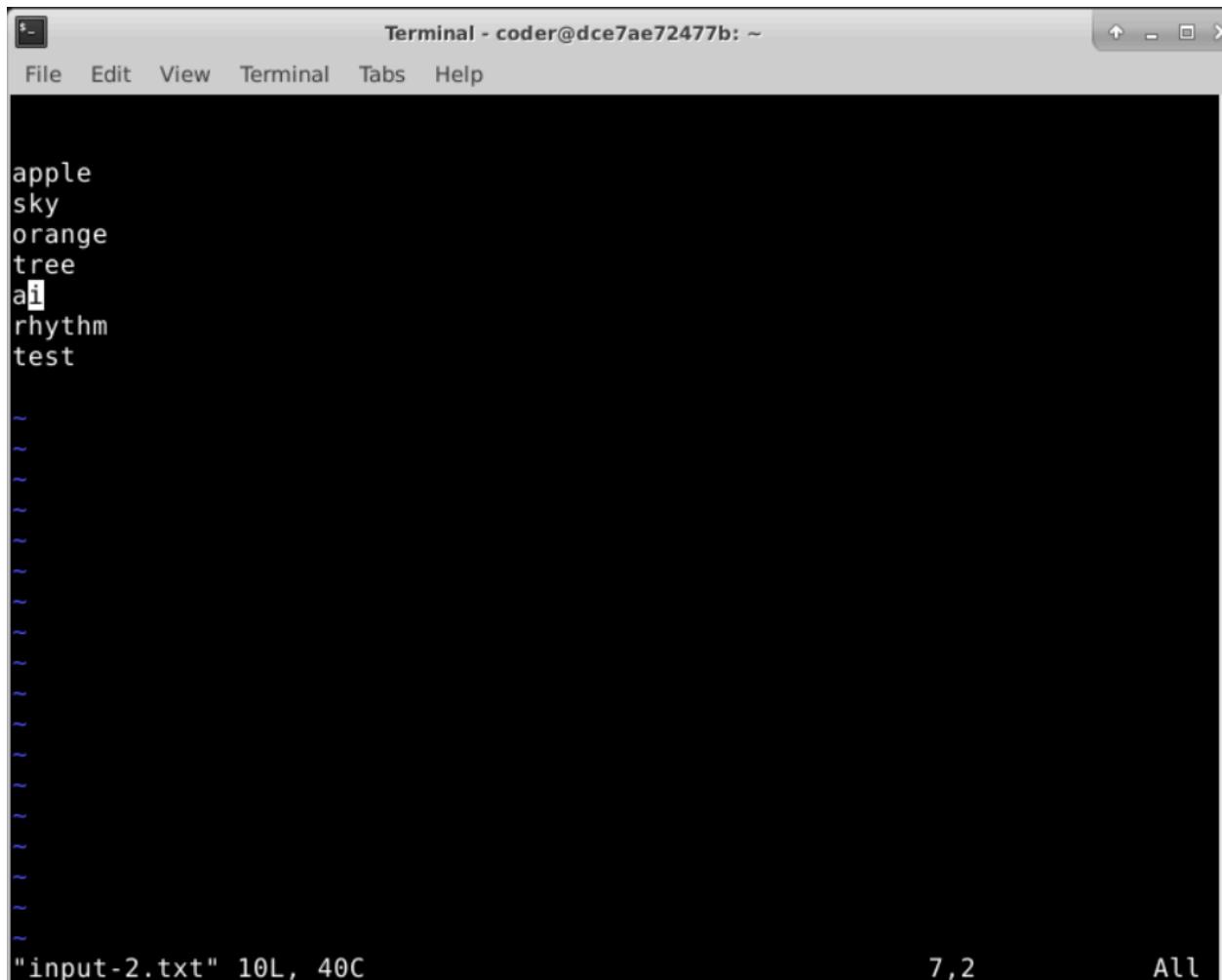


QUESTION 7 ANSWERS



A screenshot of a terminal window titled "Terminal - coder@dce7ae72477b: ~". The window has a menu bar with File, Edit, View, Terminal, Tabs, and Help. The main pane displays the following text:

```
apple
sky
orange
tree
ai
rhythm
test

~
```

The status bar at the bottom shows the file name "input-2.txt" and its statistics: 10L, 40C. To the right of the file stats are two small icons: a "7,2" icon and an "All" icon.

```
File Edit View Terminal Tabs Help
#!/bin/bash
if [ $# -ne 1 ]; then
    echo "Usage: $0 <inputfile>"
    exit 1
fi
file=$1
if [ ! -f "$file" ]; then
    echo "Error: File does not exist."
    exit 1
fi
words=$(tr -cs '[:alpha:]' '\n' < "$file" | tr '[:upper:]' '[:lower:]' | grep -v '^$' > words_temp.txt)
echo "$words" | grep -E '^[aeiou]+$' words_temp.txt | sort | uniq > vowels.txt
echo "$words" | grep -E '^[^aeiou]+$' words_temp.txt | sort | uniq > constants.txt
echo "$words" | grep -E '^[^aeiou]' words_temp.txt | grep '[aeiou]' words_temp.txt | sort | uniq > mixed.txt
rm -f words_temp.txt
~
```

```
coder@fce7ae72477b:~$ vi input-2.txt
coder@fce7ae72477b:~$ vi patterns.sh
coder@fce7ae72477b:~$ chmod +x patterns.sh
coder@fce7ae72477b:~$ ./patterns.sh input-2.txt
coder@fce7ae72477b:~$ cat vowels.txt
ai
coder@fce7ae72477b:~$ cat constants.txt
rhythm
sky
coder@fce7ae72477b:~$ cat mixed.txt
ai
apple
orange
test
tree
coder@fce7ae72477b:~$
```

I created a shell script that reads a text file and classifies words based on vowel and consonant patterns, ignoring case. Words containing only vowels are written to `vowels.txt`, only consonants to `consonants.txt`, and mixed words starting with a consonant to `mixed.txt`. Pattern matching was implemented using `grep` with regular expressions.