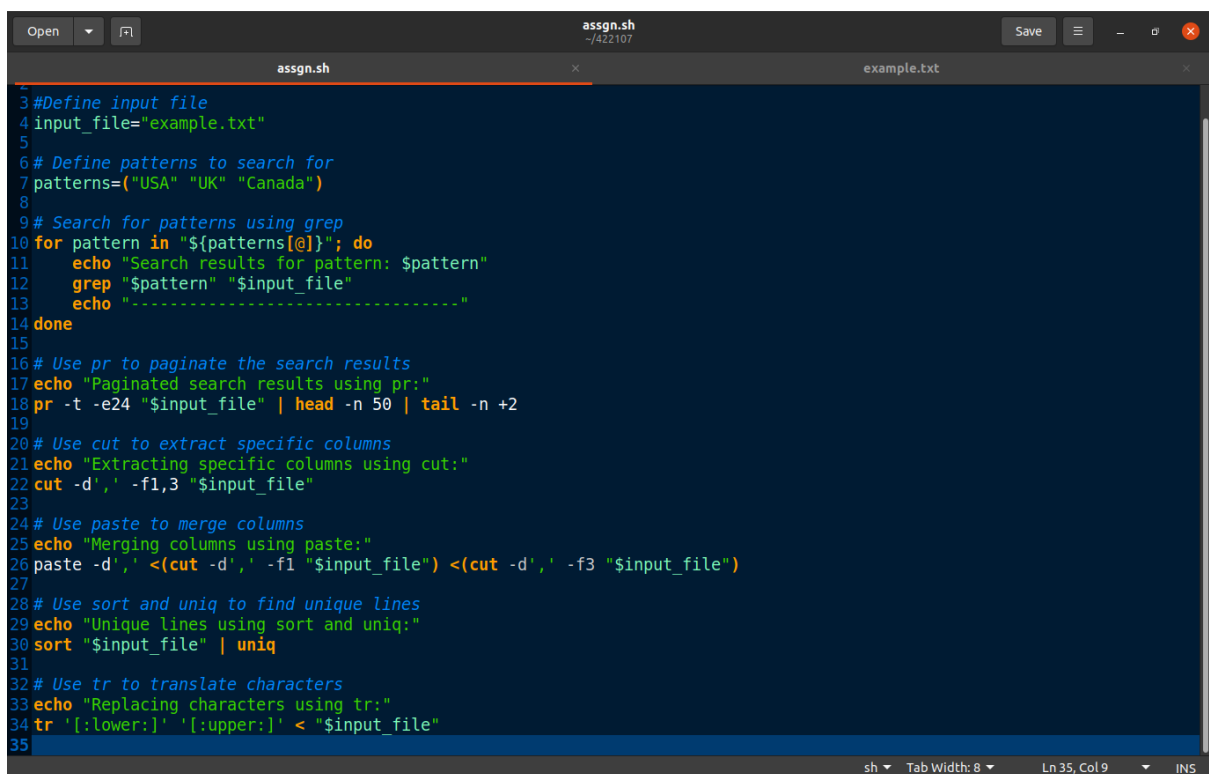# Assignment-01

NAME: A.AKASH NAIK

SECTION: A

ROLL NO: 422104

Q: Write shell script for searching for various patterns using grep, pr, head, tail, cut, paste, sort, uniq, and tr.

INPUT:

```sh
#Define input file
input_file="example.txt"

# Define patterns to search for
patterns=("USA" "UK" "Canada")

# Search for patterns using grep
for pattern in "${patterns[@]}"; do
    echo "Search results for pattern: $pattern"
    grep "$pattern" "$input_file"
    echo "--------------------------------"
done

# Use pr to paginate the search results
echo "Paginated search results using pr:"
pr -t -e24 "$input_file" | head -n 50 | tail -n +2

# Use cut to extract specific columns
echo "Extracting specific columns using cut:"
cut -d',' -f1,3 "$input_file"

# Use paste to merge columns
echo "Merging columns using paste:"
paste -d',' <(cut -d',' -f1 "$input_file") <(cut -d',' -f3 "$input_file")

# Use sort and uniq to find unique lines
echo "Unique lines using sort and uniq:"
sort "$input_file" | uniq

# Use tr to translate characters
echo "Replacing characters using tr:"
tr '[:lower:]' '[:upper:]' < "$input_file"
```

example.txt
~/422107

| assgn.sh | | example.txt | |

```
 1 Name,Age,Country
 2 John,30,USA
 3 Alice,25,Canada
 4 Bob,40,UK
 5 David,35,USA
 6 Eva,28,Germany
 7 Alice,25,Canada
 8 JOhn,30,USA
 9 Bob,40,UK
10 David,35,USA
```

Plain Text ▾   Tab Width: 8 ▾   Ln 10, Col 13 ▾   INS

OUTPUT:


```
bash: export: `HADOOP_OPTS-Djava.library.path=/home/hdoop/hadoop-3.3.6/lib/nativ': not a valid identifier
student@ai-HP-ProDesk-600-G4-MT:~/422107$ chmod +x assgn.sh
student@ai-HP-ProDesk-600-G4-MT:~/422107$ ./assgn.sh
Search results for pattern: USA
John,30,USA
David,35,USA
JOhn,30,USA
David,35,USA
--------------------------------
Search results for pattern: UK
Bob,40,UK
Bob,40,UK
--------------------------------
Search results for pattern: Canada
Alice,25,Canada
Alice,25,Canada
--------------------------------
Paginated search results using pr:
John,30,USA
Alice,25,Canada
Bob,40,UK
David,35,USA
Eva,28,Germany
Alice,25,Canada
JOhn,30,USA
Bob,40,UK
David,35,USA
Extracting specific columns using cut:
Name,Country
John,USA
Alice,Canada
Bob,UK
David,USA
Eva,Germany
Alice,Canada
JOhn,USA
Bob,UK
David,USA
Merging columns using paste:
Name,Country
John,USA
Alice,Canada
Bob,UK
David,USA
Eva,Germany
Alice,Canada
```

```
JOhn,30,USA
Bob,40,UK
David,35,USA
Extracting specific columns using cut:
Name,Country
John,USA
Alice,Canada
Bob,UK
David,USA
Eva,Germany
Alice,Canada
JOhn,USA
Bob,UK
David,USA
Merging columns using paste:
Name,Country
John,USA
Alice,Canada
Bob,UK
David,USA
Eva,Germany
Alice,Canada
JOhn,USA
Bob,UK
David,USA
Unique lines using sort and uniq:
Alice,25,Canada
Bob,40,UK
David,35,USA
Eva,28,Germany
John,30,USA
JOhn,30,USA
Name,Age,Country
Replacing characters using tr:
NAME,AGE,COUNTRY
JOHN,30,USA
ALICE,25,CANADA
BOB,40,UK
DAVID,35,USA
EVA,28,GERMANY
ALICE,25,CANADA
JOHN,30,USA
BOB,40,UK
DAVID,35,USA
student@ai-HP-ProDesk-600-G4-MT:~/422107$
```