Instructions:

Write the answer to each question below the question in the space provided. You can "wrap-around" the answer on separate lines if you need more space.

Part A: Display Results from Using the sed Utility

Note the contents from the following tab-delimited file called **~murray.saul/uli101/stuff.txt**: (this file pathname exists for checking your work)

```
Line one.
This is the second line.
This is the third.
This is line four.
Five.
Line six follows
Followed by 7
Now line 8
and line nine
Finally, line 10
```

Write the results of each of the following Linux commands for the above-mentioned file.

```
1. sed -n '3,6 p' ~murray.saul/uli101/stuff.txt
   ->
   This is the third.
   This is line four.
   Five.
   Line six follows
2. sed '4 q' ~murray.saul/uli101/stuff.txt
   This is line four.
3. sed '/the/ d' ~murray.saul/uli101/stuff.txt
   ->
Line one.
This is the second line.
This is line four.
Five.
Line six follows
Followed by 7
Now line 8
and line nine
Finally, line 10
```

```
4. sed 's/line/NUMBER/g' ~murray.saul/uli101/stuff.txt
   ->
   NUMBER one.
   This is the second NUMBER.
   This is the third.
   This is NUMBER four.
   Five.
   NUMBER six follows
   Followed by 7
   Now NUMBER 8
   and NUMBER nine
   Finally, NUMBER 10
```

Part B: Writing Linux Commands Using the sed Utility

Write a single Linux command to perform the specified tasks for each of the following questions.

- 1. Write a Linux sed command to display only lines 5 to 9 for the file: ~murray.saul/uli101/stuff.txt -> sed -n '5,9 p' ~murray.saul/uli101/stuff.txt
- 2. Write a Linux sed command to display only lines the begin the pattern "and" for the file: "murray.saul/uli101/stuff.txt
 - -> sed -n '/^and/ p' ~murray.saul/uli101/stuff.txt
- 3. Write a Linux sed command to display only lines that end with a digit for the file: ~murray.saul/uli101/stuff.txt -> sed -n '/[0-9]\$/ p' ~murray.saul/uli101/stuff.txt
- 4. Write a Linux sed command to save lines that match the pattern "line" (upper or lowercase) for the file: "murray.saul/uli101/stuff.txt and save results (overwriting previous contents) to: "/results.txt

```
-> sed -n '/[lL][iI][nN][eE]/ w ~/results.txt'
~murray.saul/uli101/stuff.txt
```

Part C: Writing Linux Commands Using the awk Utility

Note the contents from the following tab-delimited file called "murray.saul/uli101/stuff.txt: (this file pathname exists for checking your work)

```
Line one.
This is the second line.
This is the third.
This is line four.
Five.
Line six follows
Followed by 7
Now line 8
and line nine
Finally, line 10
```

Write the results of each of the following Linux commands for the above-mentioned file.

- 5. awk 'NR == 3 {print}' ~murray.saul/uli101/stuff.txt -> awk 'NR == 3 {print}' ~murray.saul/uli101/stuff.txt
- 6. awk 'NR >= 2 && NR <= 5 {print}' ~murray.saul/uli101/stuff.txt -> awk 'NR >= 2 && NR <= 5 {print}' ~murray.saul/uli101/stuff.txt
- 7. awk '\$1 ~ /This/ {print \$2}' ~murray.saul/uli101/stuff.txt -> awk '\$1 ~ /This/ {print \$2}' ~murray.saul/uli101/stuff.txt
- 8. awk '\$1 ~ /This/ {print \$3,\$2}' ~murray.saul/uli101/stuff.txt -> awk '\$1 ~ /This/ {print \$3,\$2}' ~murray.saul/uli101/stuff.txt

Part D: Writing Linux Commands Using the awk Utility

Write a single Linux command to perform the specified tasks for each of the following questions.

- 5. Write a Linux awk command to display all records for the file: ~/cars whose fifth field is greater than 10000.
 - -> awk '\$5 > 10000 {print}' ~/cars
- 6. Write a Linux awk command to display the first and fourth fields for the file: ~/cars whose fifth field begins with a number.
 - -> awk '\$5 ~ /^[0-9]/ {print \$1,\$4}' ~/cars
- 7. Write a Linux awk command to display the second and third fields for the file: ~/cars for records that match the pattern "chevy".
 - -> awk '\$0 ~ /chevy/ {print \$2,\$3}' ~/cars
- 8. Write a Linux awk command to display the first and second fields for all the records contained in the file: ~/cars
 - -> awk '{print \$1,\$2}' ~/cars