OPS102: Introduction to Shell Scripting Lab

Name:- Chetan Arora
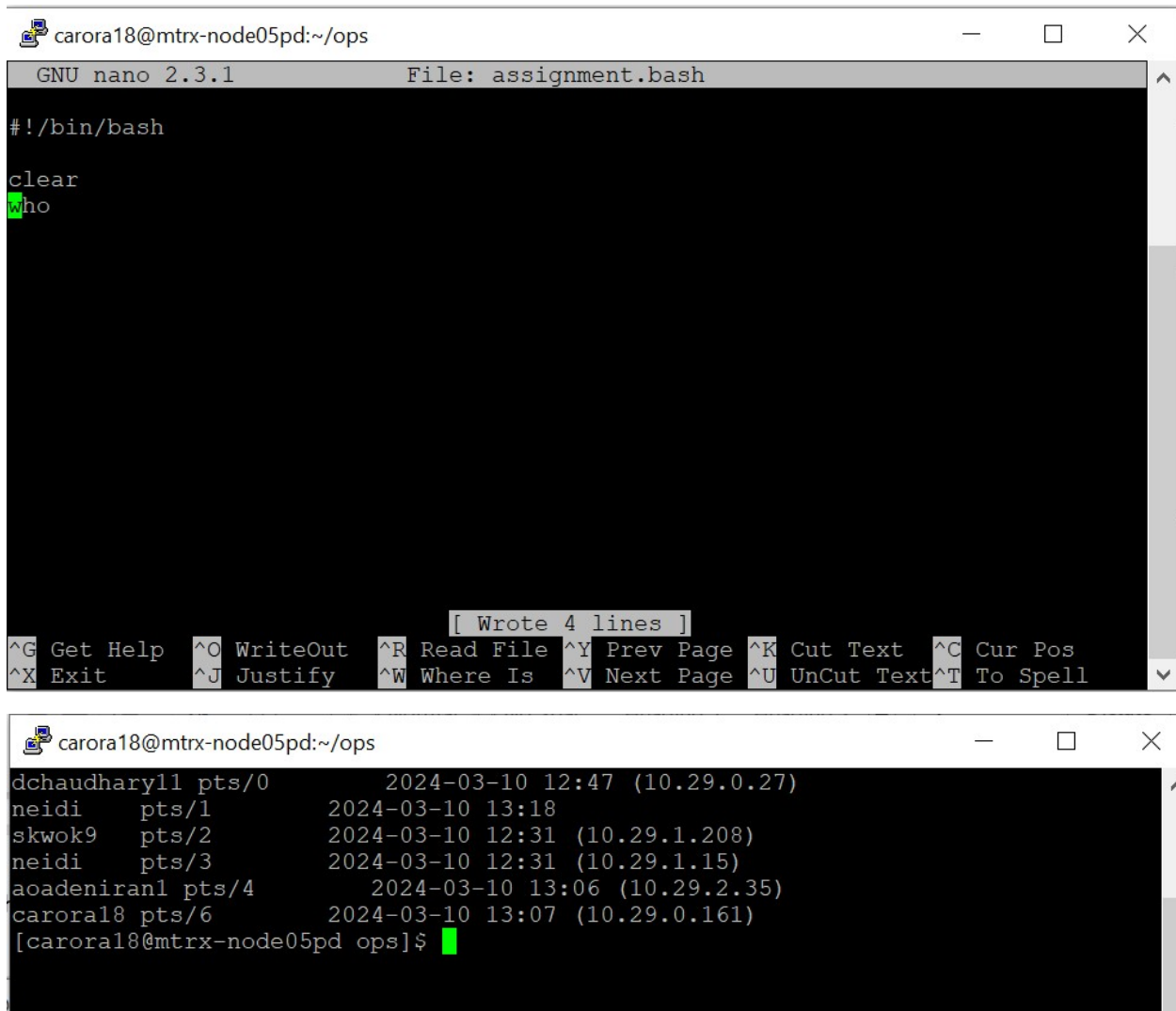**Student ID- 100976240**
Email:- carora18@myseneca.ca

Include screenshots of your outputs and upload

Task 1
Create a Bash Shell script to clear the screen and then display all users that are currently logged onto the system.

Task 2:

Write a Bash shell script to display the following message using an **environment variable** so it will work in any user's terminal if the shell script was issued:

My username is: (your-username)

```
carora18@mtrx-node05pd:~/ops                                    —    □    ×

  GNU nano 2.3.1                  File: assignment.bash

#!/bin/bash

echo "My username is: $USER"
```

```
carora18@mtrx-node05pd:~/ops                                    —    □    ×

[carora18@mtrx-node05pd ops]$ nano assignment.bash
[carora18@mtrx-node05pd ops]$ assignment.bash
My username is: carora18
[carora18@mtrx-node05pd ops]$
```
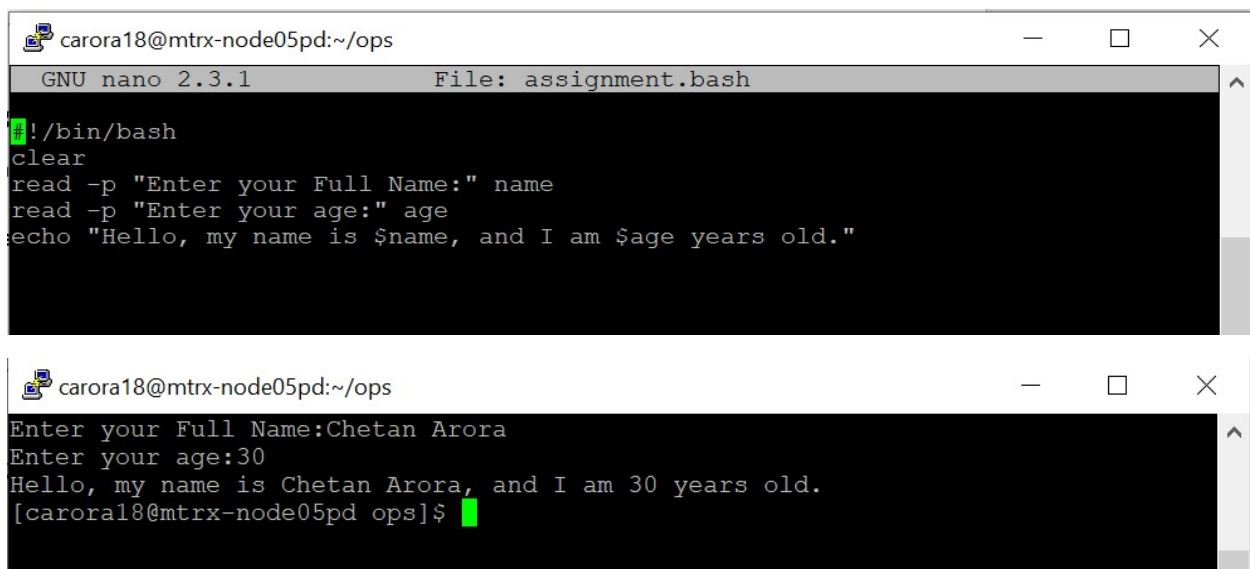
Task 3:

Write a Bash shell script to prompt the user for their **full name** and prompt the user for their **age** to be stored in **user-defined** variables.

Display the following output using the values of those variables:

Enter your Full Name: (your full name)
Enter your Age: (your age)
Hello, my name is (your full name), and I am (your age) years old.

```
carora18@mtrx-node05pd:~/ops                                    —    □    ×

  GNU nano 2.3.1                  File: assignment.bash

#!/bin/bash
clear
read -p "Enter your Full Name:" name
read -p "Enter your age:" age
echo "Hello, my name is $name, and I am $age years old."
```

```
carora18@mtrx-node05pd:~/ops                                    —    □    ×

Enter your Full Name:Chetan Arora
Enter your age:30
Hello, my name is Chetan Arora, and I am 30 years old.
[carora18@mtrx-node05pd ops]$
```

Task 4

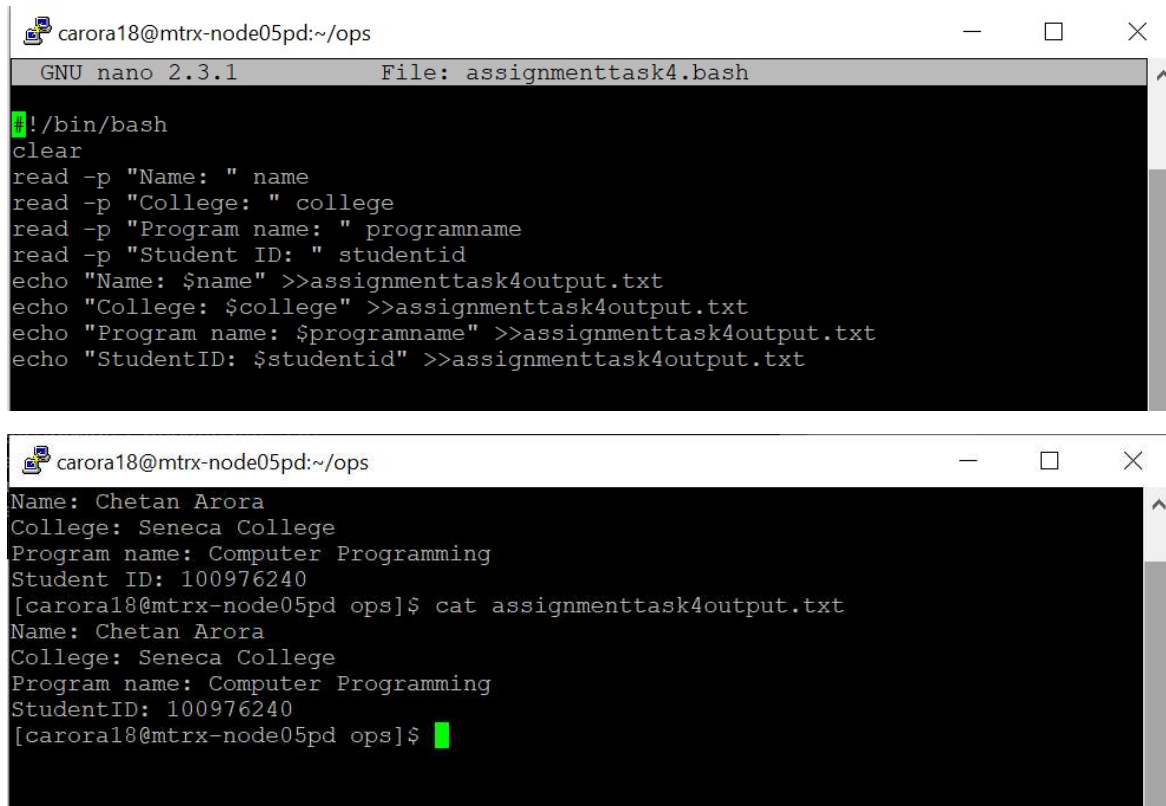Write a shell script that reads following information from user and writes into a file.

Name:
College:
Program name
Student ID
The script should read name of the script from the user.

```
carora18@mtrx-node05pd:~/ops                                    —    □    ×

  GNU nano 2.3.1              File: assignmenttask4.bash

#!/bin/bash
clear
read -p "Name: " name
read -p "College: " college
read -p "Program name: " programname
read -p "Student ID: " studentid
echo "Name: $name" >>assignmenttask4output.txt
echo "College: $college" >>assignmenttask4output.txt
echo "Program name: $programname" >>assignmenttask4output.txt
echo "StudentID: $studentid" >>assignmenttask4output.txt
```

```
carora18@mtrx-node05pd:~/ops                                    —    □    ×

Name: Chetan Arora
College: Seneca College
Program name: Computer Programming
Student ID: 100976240
[carora18@mtrx-node05pd ops]$ cat assignmenttask4output.txt
Name: Chetan Arora
College: Seneca College
Program name: Computer Programming
StudentID: 100976240
[carora18@mtrx-node05pd ops]$
```
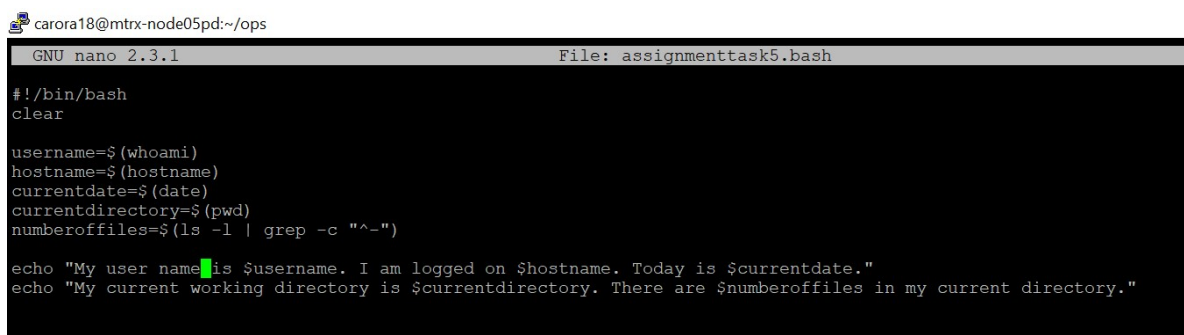
Task 5

Write a script that write the following into the file read in Task 3:

My is <user name>. I am logged on <hostname>. Today is <date>.
My current working directory is <directory>. There are <number of files> in my current directory

```
carora18@mtrx-node05pd:~/ops

  GNU nano 2.3.1                          File: assignmenttask5.bash

#!/bin/bash
clear

username=$(whoami)
hostname=$(hostname)
currentdate=$(date)
currentdirectory=$(pwd)
numberoffiles=$(ls -l | grep -c "^-")

echo "My user name is $username. I am logged on $hostname. Today is $currentdate."
echo "My current working directory is $currentdirectory. There are $numberoffiles in my current directory."
```

```
My user name is carora18. I am logged on mtrx-node05pd.dcm.senecacollege.ca. Today is Sun Mar 10 14:42:14 EDT 2024.
My current working directory is /home/carora18/ops. There are 4 in my current directory.
[carora18@mtrx-node05pd ops]$
```

Task 6:

Make a file and enter following script:

```
#!/bin/bash

a=10
b=2

echo "$a + $b: $((a+b))"
echo "$a - $b: $((a-b))"
echo "$a * $b: $((a*b))"
echo "$a / $b: $((a/b))"
```

Modify the script to read variables a and b from user. Make interactive program to read variables.

```
  GNU nano 2.3.1            File: assignmenttask6.bash                    Modified

#!/bin/bash
clear
read -p "Enter the value of a:" a
read -p "Enter the value of b:" b

echo "$a + $b: $((a+b))"
echo "$a - $b: $((a-b))"
echo "$a * $b: $((a*b))"
echo "$a / $b: $((a/b))"
```

```
Enter the value of a:10
Enter the value of b:2
10 + 2: 12
10 - 2: 8
10 * 2: 20
10 / 2: 5
[carora18@mtrx-node05pd ops]$
```