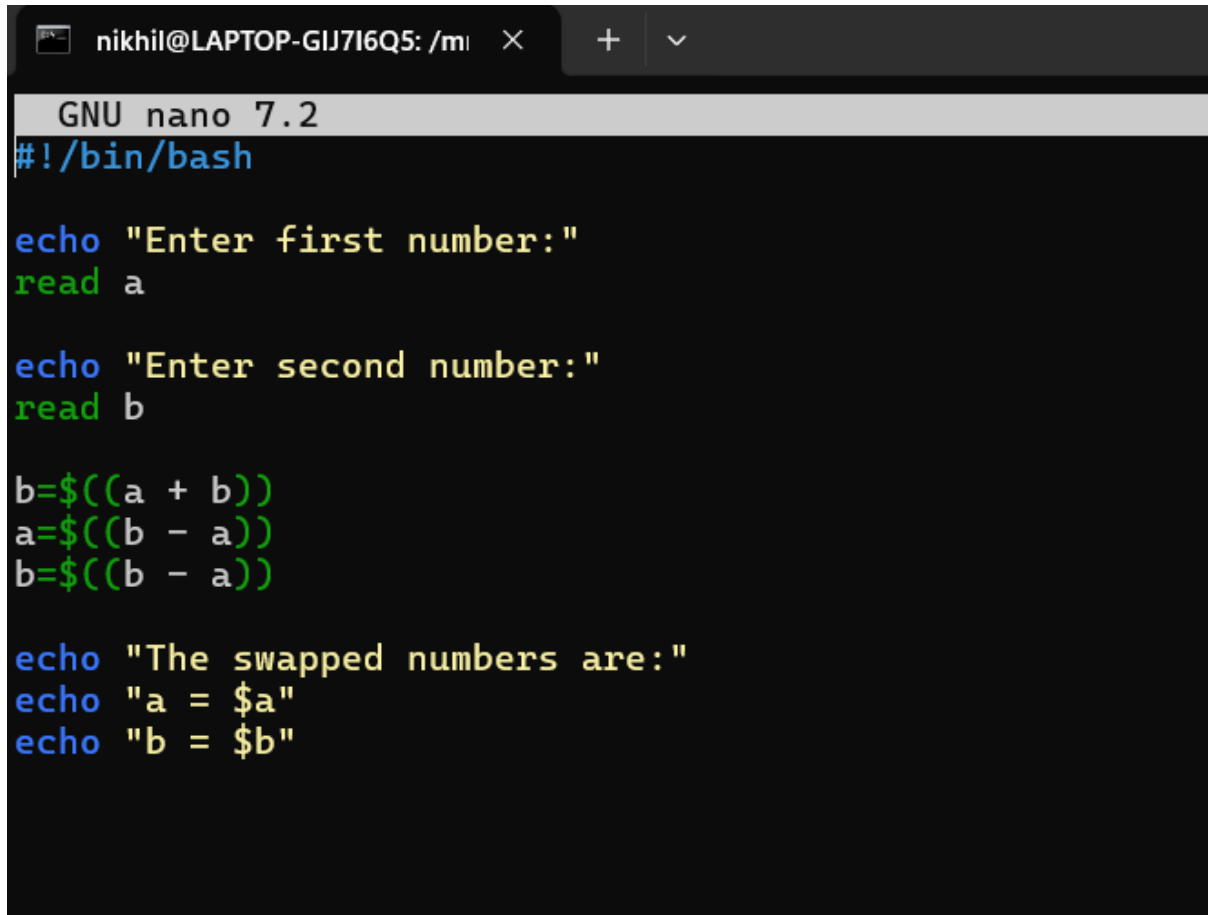


SHELL SCRIPTS

1. Swapping Two Numbers Without a Temporary Variable

Code Screenshot:



```
nikhil@LAPTOP-GIJ7I6Q5: /mnt/ × + v
GNU nano 7.2
#!/bin/bash

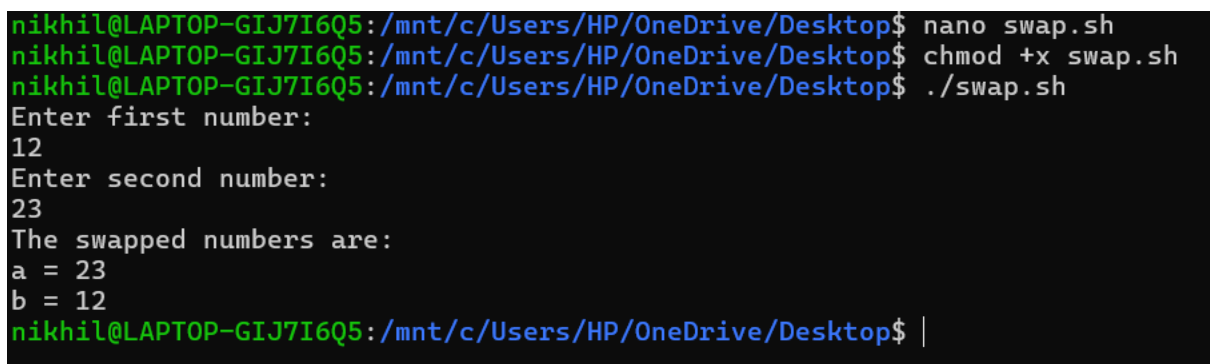
echo "Enter first number:"
read a

echo "Enter second number:"
read b

b=$((a + b))
a=$((b - a))
b=$((b - a))

echo "The swapped numbers are:"
echo "a = $a"
echo "b = $b"
```

Output Screenshot:



```
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ nano swap.sh
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ chmod +x swap.sh
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ ./swap.sh
Enter first number:
12
Enter second number:
23
The swapped numbers are:
a = 23
b = 12
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ |
```

```
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ chmod +x swap.sh
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ ./swap.sh
Enter first number:
15
Enter second number:
78
The swapped numbers are:
a = 78
b = 15
```

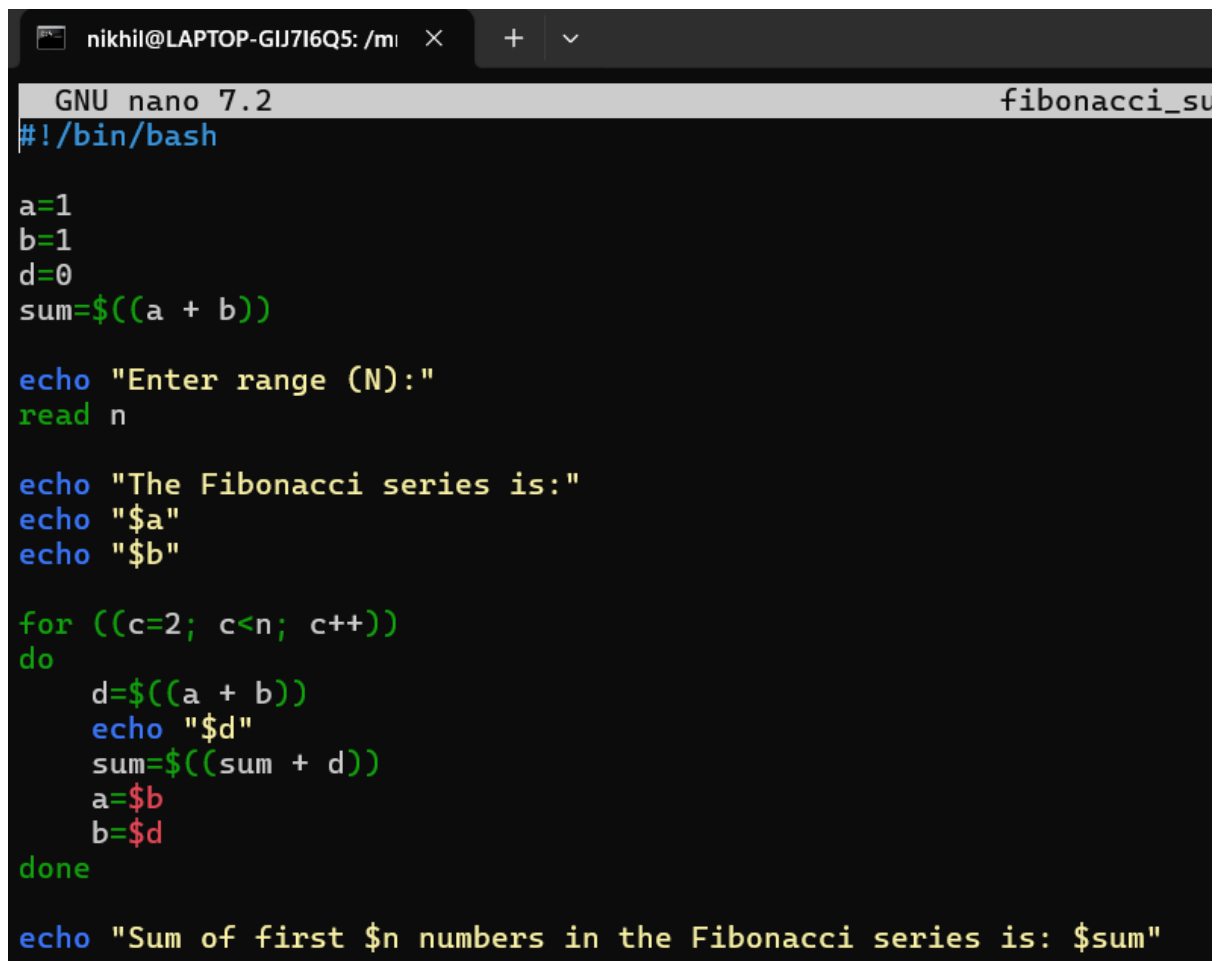
Description:

Script 1: Swapping Two Numbers Without a Temporary Variable

This script takes two numbers as input, swaps them without using a third variable, and displays the swapped values.

2. Sum of First N Numbers in Fibonacci Series

Code Screenshot:



```
nikhil@LAPTOP-GIJ7I6Q5: /mi  ×  +  v
GNU nano 7.2 fibonacci_su
#!/bin/bash

a=1
b=1
d=0
sum=$((a + b))

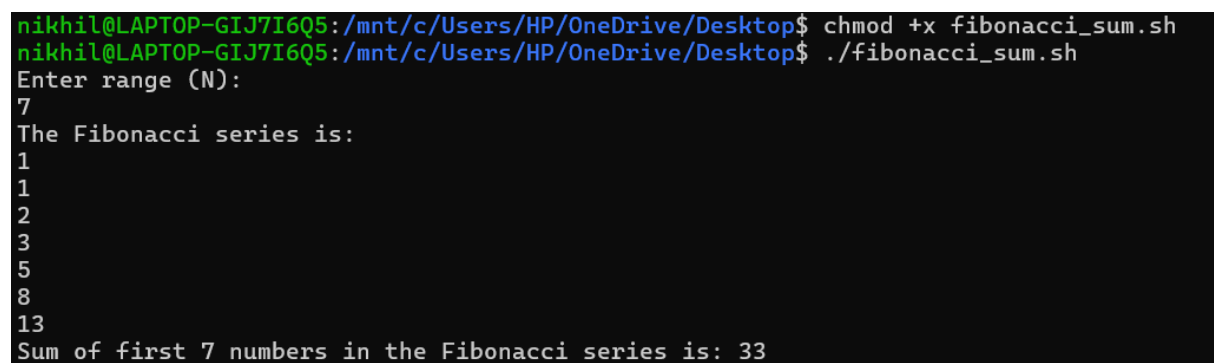
echo "Enter range (N):"
read n

echo "The Fibonacci series is:"
echo "$a"
echo "$b"

for ((c=2; c<n; c++))
do
    d=$((a + b))
    echo "$d"
    sum=$((sum + d))
    a=$b
    b=$d
done

echo "Sum of first $n numbers in the Fibonacci series is: $sum"
```

Output Screenshot:



```
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ chmod +x fibonacci_sum.sh
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ ./fibonacci_sum.sh
Enter range (N):
7
The Fibonacci series is:
1
1
2
3
5
8
13
Sum of first 7 numbers in the Fibonacci series is: 33
```

```
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ nano fibonacci_sum.sh
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ chmod +x fibonacci_sum.sh
nikhil@LAPTOP-GIJ7I6Q5:/mnt/c/Users/HP/OneDrive/Desktop$ ./fibonacci_sum.sh
Enter range (N):
10
The Fibonacci series is:
1
1
2
3
5
8
13
21
34
55
Sum of first 10 numbers in the Fibonacci series is: 143
```

Description:

This script calculates the Fibonacci series up to N terms and computes the sum of these terms.