

LAB 3 – Enhanced Number Script

Original Behavior

```
GNU nano 7.2 enhanced_numbers.sh
#!/bin/bash

# Get inputs from user
read -p "Enter start number: " start
read -p "Enter end number: " end
read -p "Enter step (positive number): " step

# Validate step
if ! [[ "$step" =~ ^[0-9]+$ ]] || [ "$step" -le 0 ]; then
    echo "Error: Step must be a positive integer."
    exit 1
fi

# Loop from start to end with step
for (( i=start; i<=end; i+=step ))
do
    echo "Number: $i"
done
```

OUTPUT:

```
bhaktib0108@bhaktib0108-VirtualBox:~$ cd scripts
bhaktib0108@bhaktib0108-VirtualBox:~/scripts$ touch print_numbers.sh
bhaktib0108@bhaktib0108-VirtualBox:~/scripts$ nano print_numbers.sh
bhaktib0108@bhaktib0108-VirtualBox:~/scripts$ nano print_numbers.sh
bhaktib0108@bhaktib0108-VirtualBox:~/scripts$ chmod enhanced_numbers.sh
chmod: missing operand after 'enhanced_numbers.sh'
Try 'chmod --help' for more information.
bhaktib0108@bhaktib0108-VirtualBox:~/scripts$ chmod 777 enhanced_numbers.sh
bhaktib0108@bhaktib0108-VirtualBox:~/scripts$ ./enhanced_numbers.sh
Enter start number: 2
Enter end number: 10
Enter step (positive number): 2
Number: 2
Number: 4
Number: 6
Number: 8
Number: 10
bhaktib0108@bhaktib0108-VirtualBox:~/scripts$
```

Script: `print_numbers.sh`

- Printed numbers from 1 to 5 using a hardcoded `for` loop:

```
for i in 1 2 3 4 5
do
    echo "Number: $i"
done
```