I.PADMA KIREETI

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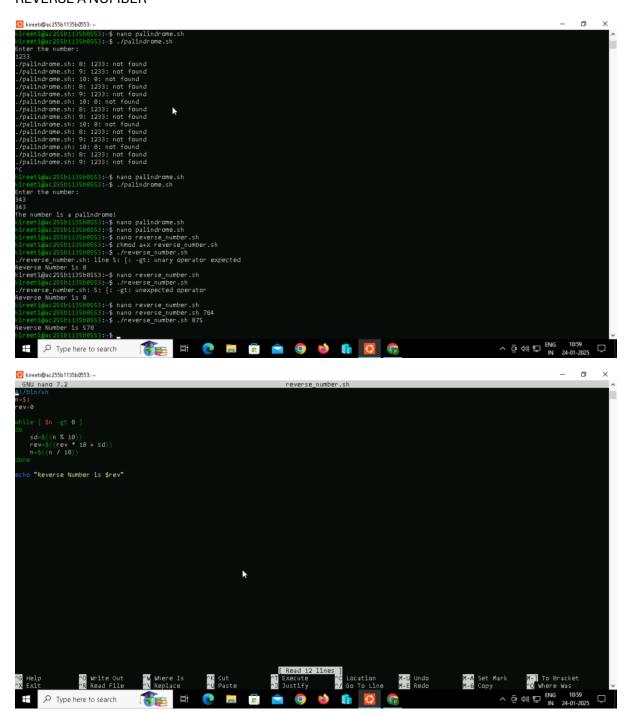## PALINDROME CODE

```
#!/bin/sh
echo "Enter the number:"
read n
num=$n
rev=0

while [ $n -gt 0 ]
do
    a=$((n % 10))          # Get the last digit of the number
    n=$((n / 10))          # Remove the last digit from the number
    rev=$((rev * 10 + a))  # Build the reversed number
done

echo $rev

if [ $num -eq $rev ]; then
    echo "The number is a palindrome!"
else
    echo "The number is not a palindrome number!"
fi
```

REVERSE A NUMBER

PASCAL TRAINGLE PROGRAM:

ARRAY SUM:

BUBBLE SORT:


```bash
#!/bin/bash

# Declare and initialize the array
declare -a arr
arr=(10 8 20 100 12)

echo "Entered array:"
echo "${arr[@]}"

# Get the length of the array
n=${#arr[@]}

# Bubble sort implementation
for ((i = 0; i < n-1; i++)) # Loop through the array
do
  for ((j = 0; j < n-i-1; j++)) # Compare adjacent elements
  do
    if [ ${arr[j]} -gt ${arr[$((j+1))]} ]; then
      # Swap elements if the current is greater than the next
      temp=${arr[j]}
      arr[$j]=${arr[$((j+1))]}
      arr[$((j+1))]=$temp
    fi
  done
done

# Print the sorted array
echo "Sorted array:"
echo "${arr[@]}"
```

ARTHEMATIC SUM OF TWO NUMBERS CODE:


```bash
#Shell program to add two integer values and check if any input is given or not
#!/usr/bin/bash

read -p "Input1 : " inp1
if [[ -z $inp1 ]]
then
        echo "Input 1 canoot be empty, please enter an integer."
exit
fi

read -p "Input2 :" inp2
if [[ -z $inp2 ]]
then
        echo "Input2 cannot be empty, please enter an integer"
        exit
fi

bc_val=`echo "$inp1+$inp2" | bc`
echo "BC Value : $bc_val"

expr_val=`expr $inp1 + $inp2`
echo "EXPR Value : $expr_val"
```



```
kireeti@ac255b1135b0553:~$ nano add.sh
kireeti@ac255b1135b0553:~$ chmod a+x add.sh
kireeti@ac255b1135b0553:~$ ls
add.sh  file1.sh  greet.sh  greeting.sh  index.html  nami  rin  script.sh  snap  test_website  testfile
kireeti@ac255b1135b0553:~$ ls -lte
ls: invalid option -- 'e'
Try 'ls --help' for more information.
kireeti@ac255b1135b0553:~$ ls -ltr
total 28
-rw-r--r-- 1 kireeti kireeti  164 Jan 21 07:09 index.html
-rwxr-xr-x 1 kireeti kireeti  141 Jan 22 04:33 file1.sh
-rw-r--r-- 1 kireeti kireeti    0 Jan 22 04:35 rin
-rw-r--r-- 1 kireeti kireeti    0 Jan 22 04:35 nami
-rwxr-xr-x 1 kireeti kireeti  219 Jan 22 09:43 greet.sh
-rwxr-xr-x 1 kireeti kireeti  215 Jan 22 10:13 greeting.sh
-rw-r--r-- 1 kireeti kireeti    0 Jan 22 12:09 testfile
-rwxr-xr-x 1 kireeti kireeti   84 Jan 22 12:19 script.sh
-rw-r--r-- 1 kireeti kireeti    0 Jan 22 12:21 test_website
drwx------ 3 kireeti kireeti 4096 Jan 23 06:12 snap
-rwxrwxr-x 1 kireeti kireeti  445 Jan 23 12:15 add.sh
kireeti@ac255b1135b0553:~$ ./add.sh
Input1 : 23
Input2 :45
BC Value : 68
EXPR Value : 68
kireeti@ac255b1135b0553:~$
```

```
kireeti@ac255b1135b0553: ~                                                    —  □  ✕

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kireeti@ac255b1135b0553:~$ ./add.sh
Input1 :
Input 1 cannot be empty, please enter an integer.
kireeti@ac255b1135b0553:~$ ./add.sh
Input1 : 4
Input2 :
Input2 cannot be empty, please enter an integer
kireeti@ac255b1135b0553:~$ _
```

PERSONALIZED MESSAGES: