1. Write a shell script to reverse a given integer.

#!/bin/bash

read -p "Enter a integer: " num

rev\_num=0

while [[ $num -gt 0 ]]

do

remainder=$(($num % 10))

rev\_num=$(($rev\_num \* 10 + $remainder))

num=$(($num / 10))

done

echo "Reversed integer: $rev\_num"

1. Write a shell script to verify whether the given string is a palindrome or not.

#!/bin/bash

read -p "Enter string: " str

rev\_str=$(echo $str | rev)

if [[ $rev\_str == $str ]]

then

echo "$str is a palindrome."

else

echo "$str is not a palindrome."

fi

1. Write a shell script to find the following
2. Home directory 2. Bash version 3. Host name 4. current directory 5. exit

#!/bin/bash

echo "Home directory: $HOME"

echo "Bash version: $(bash --version | awk '{printf $4}')"

echo "Host name: $(hostname)"

echo "Current directory: $(pwd)"

exit 0

4. Write a shell program which takes maximum 8 integer type arguments through

command line and do the following operation:

i. If the first argument/last result (a) is divisible by send argument (b) then new result=a/b

ii. Else If (a%b != 0) and b is divisible by 5 then new result=a\*b

iii. Else if (a&gt;b) then new result=a-b

iv. Else new result=a+b

#!/bin/bash

if [[ $# -gt 8 ]]

then

echo "Max 8 args allowed!"

exit 1

fi

result=${1}

for (( i=1; i<=$#; i++ ))

do

a=$result

b=${!i}

if [[ $((a % b)) == 0 ]]

then

result=$((a / b))

elif [[ $((b % 5)) == 0 ]]

then

result=$((a \* b))

elif [[ $a -gt $b ]]

then

result=$((a - b))

else

result=$((a + b))

fi

done

echo "Final result: $result"