

**EXP NO:** 3b**) WRITE A SHELLSCRIPT TO FIBONACCI SERIES**

**DATE:28/1/25**

**PROGRAM:**

#!/bin/bash

# Prompt the user to enter a number

echo "Enter a number:"

read num

# Initialize the first two numbers in the Fibonacci series

a=0

b=1

# Print the Fibonacci series

echo "Fibonacci series up to $num:"

echo $a

echo $b

# Loop to generate Fibonacci numbers

for (( i=2; i<=num; i++ ))

do

    # Calculate the next Fibonacci number

    fib=$((a + b))

    # Print the Fibonacci number

    echo $fib

    # Update a and b for the next iteration

    a=$b

    b=$fib

done

**OUTPUT:**

Enter a number:

5

Fibonacci series up to 5:

0

1

1

2

3

5