Bash Project

Bash Case

The **Bash case** statement is the simplest form of IF-THEN-ELSE with many ELIF elements. Using the case statement makes our bash script more readable and easier to maintain. These are generally applied to simplify the complex conditions having multiple different choices.

The Bash case statement follows a similar logic as the Javascript or C switch statement. There is a slight difference, as follows:

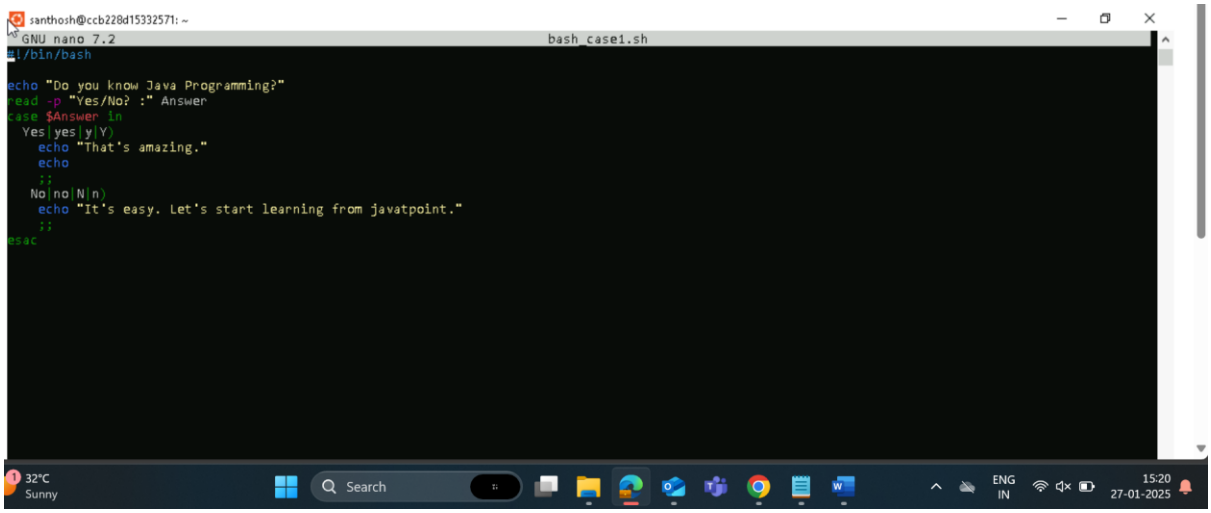
o The Bash case statement takes a value once and tests that value multiple times. It stops searching for a pattern once it has found it and executed the statement linked with it, which is almost opposite in case of the C switch statement.

Example 1

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch bash_case1.sh
santhosh@ccb228d15332571:~$ nano bash_case1.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the base_case1.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x bash_case1.sh
```

Step 4: Executing the output.

a. For Yes the output is.

```
santhosh@ccb228d15332571:~$ ./bash_case1.sh
Do you know Java Programming?
Yes/No? :Yes
That's amazing.
```

b. For No the output is.

```
santhosh@ccb228d15332571:~$ ./bash_case1.sh
Do you know Java Programming?
Yes/No? :No
It's easy. Let's start learning from javatpoint.
```

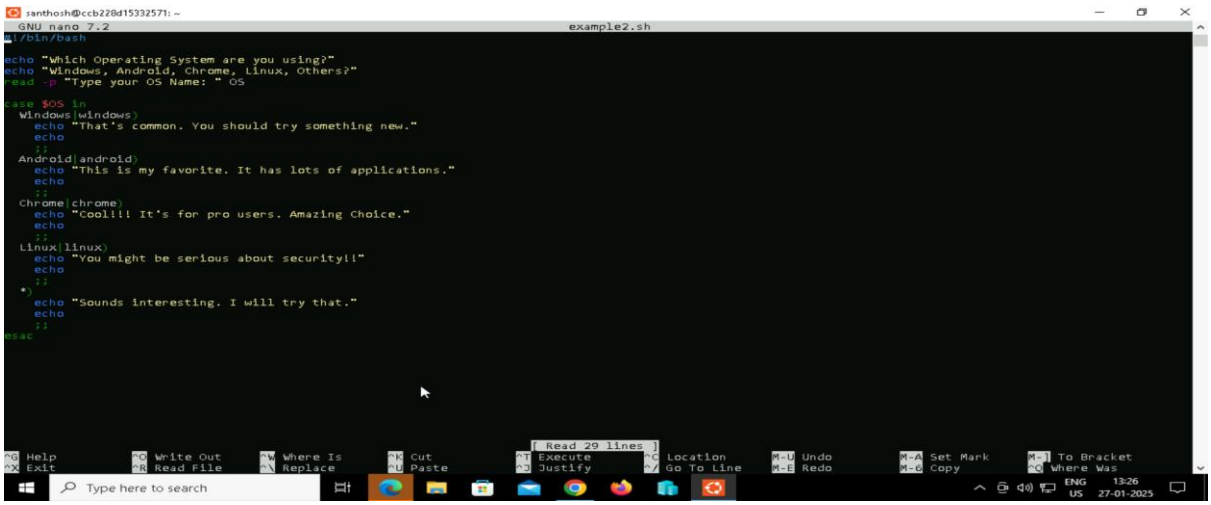
Example 2

A combined scenario where there is also a default case when no previous matched case is found.

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch example2.sh
santhosh@ccb228d15332571:~$ nano example2.sh
```

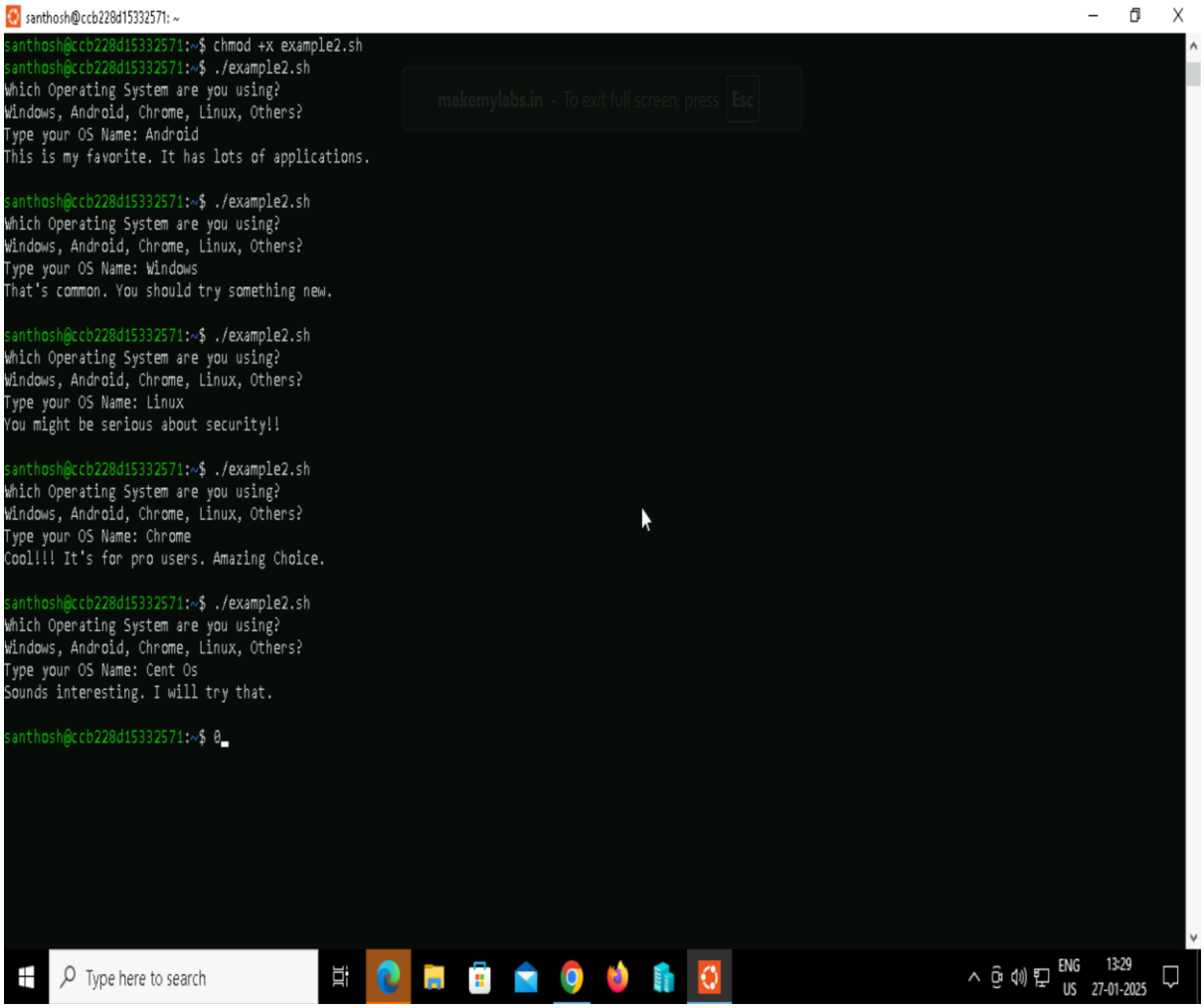
Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the example2.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x example2.sh
```

Step 4: Executing the output.



Bash For Loop

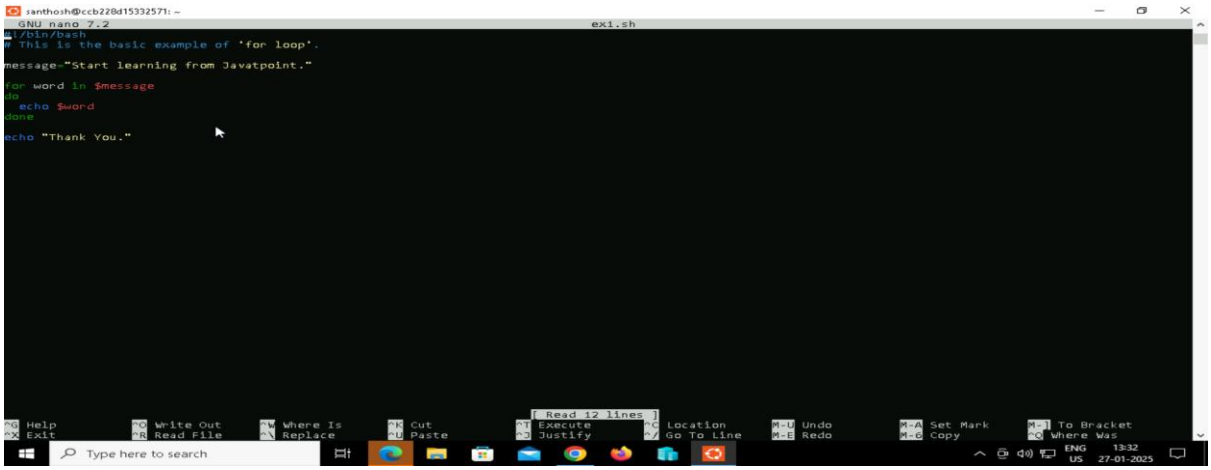
Like any other programming language, bash shell scripting also supports 'for loops' to perform repetitive tasks. It helps us to iterate a particular set of statements over a series of words in a string, or elements in an array. For example, you can either run UNIX command (or task) many times or just read and process the list of commands using a 'for loop'.

Example 1

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex1.sh
santhosh@ccb228d15332571:~$ nano ex1.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex1.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex1.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex1.sh
Start
learning
from
Javatpoint.
Thank You.
```

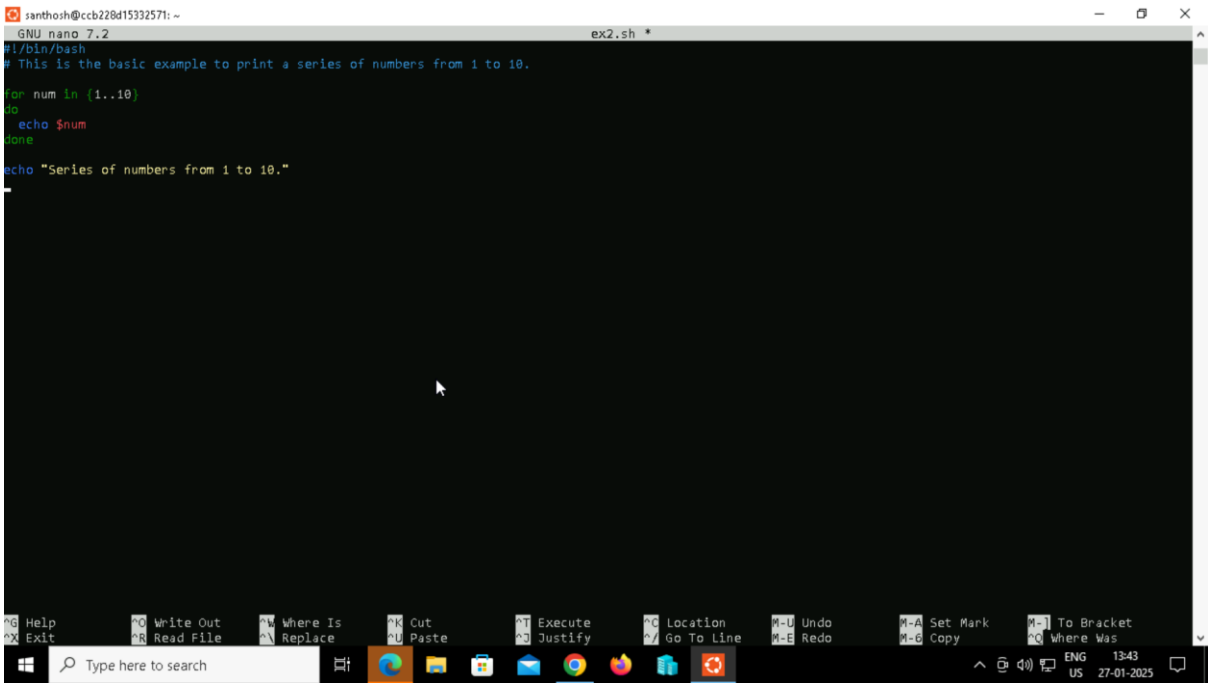
Example 2

For Loop to Read a Range

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex2.sh
santhosh@ccb228d15332571:~$ nano ex2.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex2.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex2.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex2.sh
1
2
3
4
5
6
7
8
9
10
Series of numbers from 1 to 10.
```

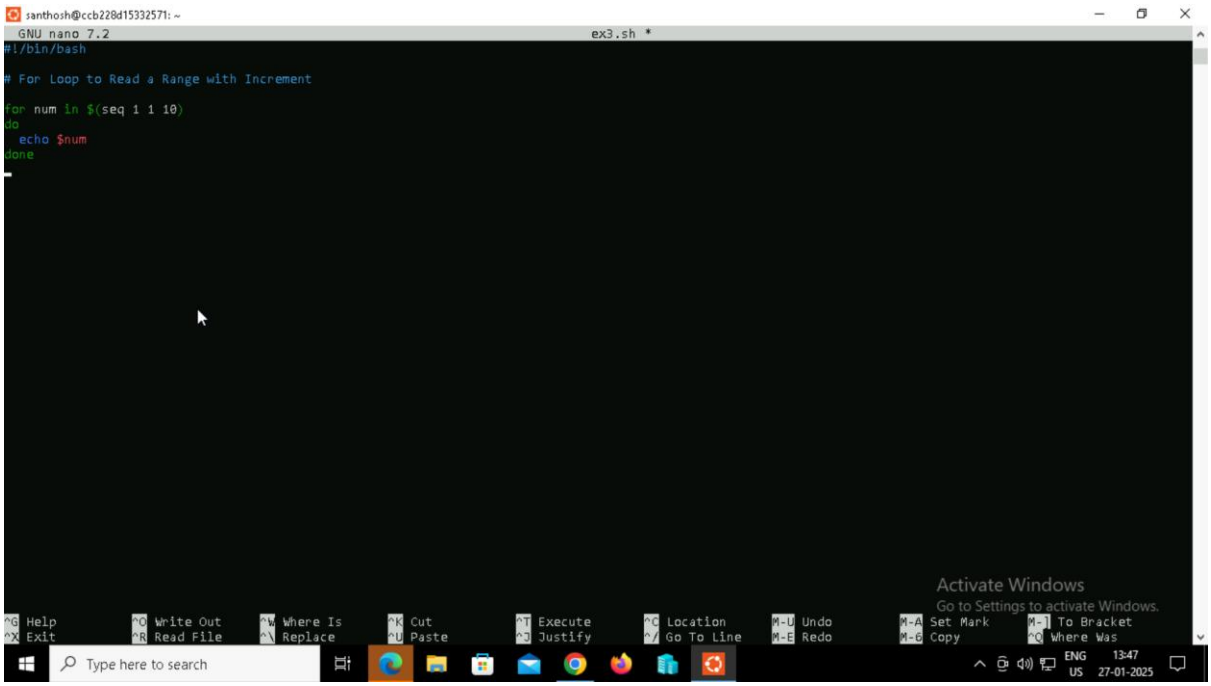
Example 3

For Loop to Read a Range with Increment/Decrement

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex3.sh
santhosh@ccb228d15332571:~$ nano ex3.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex3.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex3.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex3.sh
1
2
3
4
5
6
7
8
9
10
```

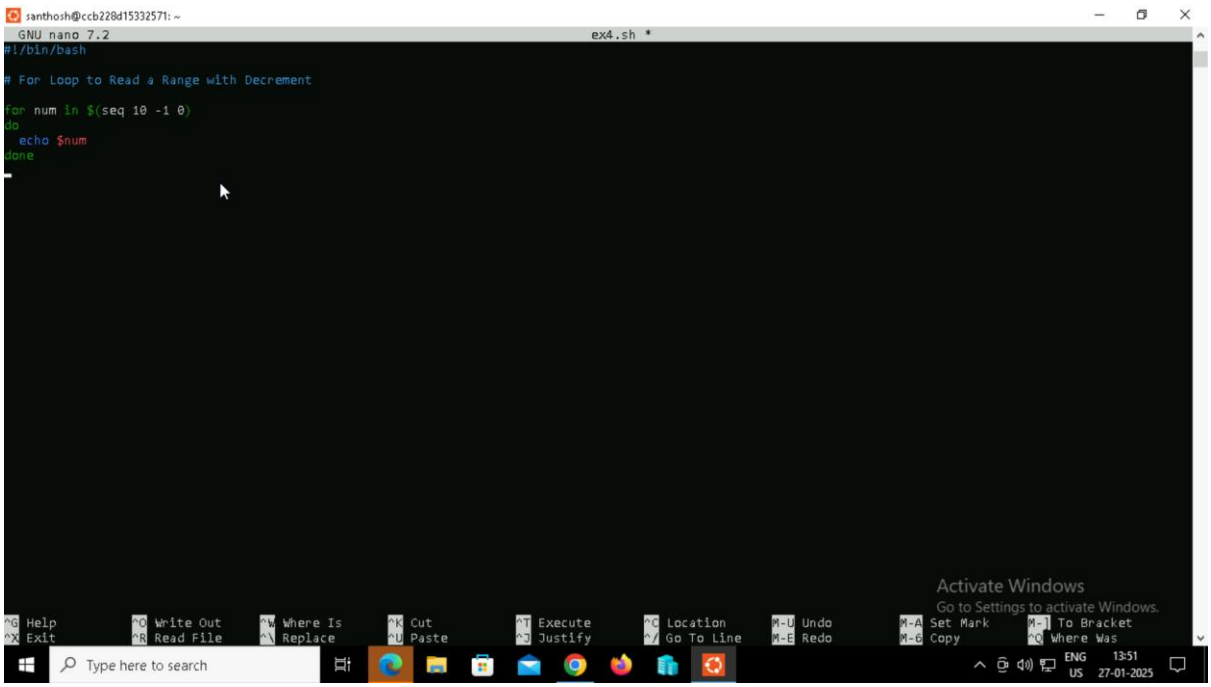
Example 4

For Decrement

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex4.sh
santhosh@ccb228d15332571:~$ nano ex4.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex4.sh script.

```
santhosh@ccb228d153325[illegible]1:~$ chmod +x ex4.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex4.sh
10
9
8
7
6
5
4
3
2
1
0
```

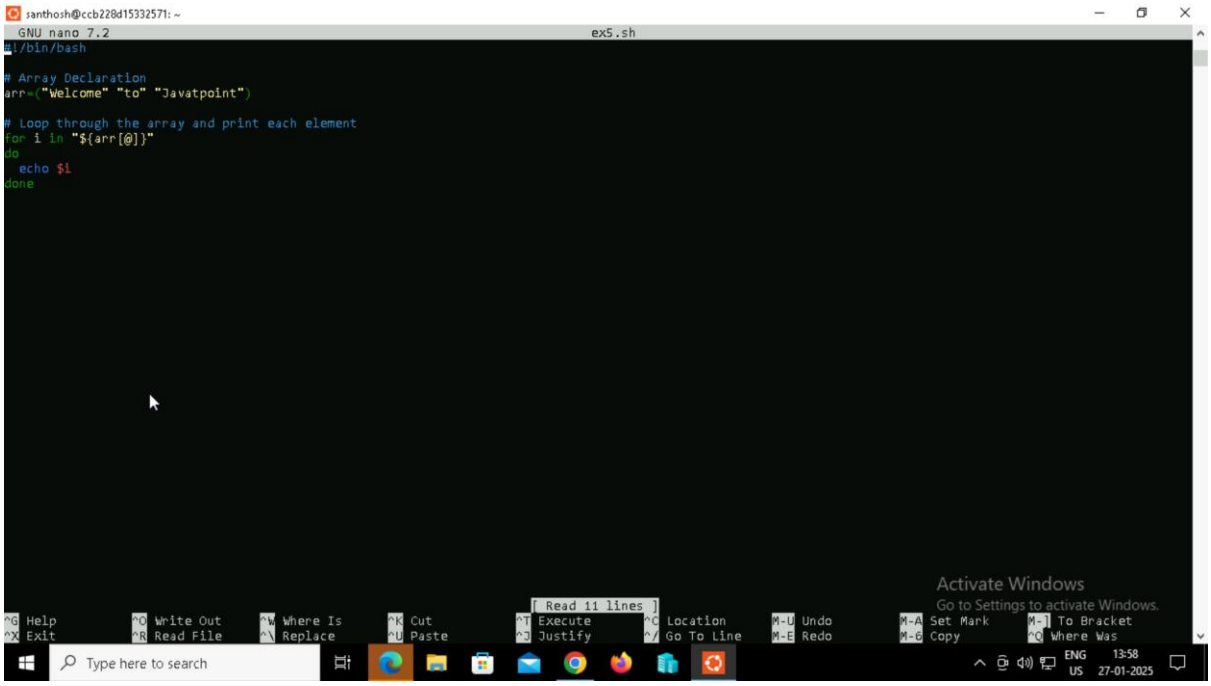
Example 5

For Loop to Read Array Variables

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex5.sh
santhosh@ccb228d15332571:~$ nano ex5.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement**.**



Step 3: Providing the necessary permissions for the ex5.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex5.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex5.sh
Welcome
to
Javatpoint
```

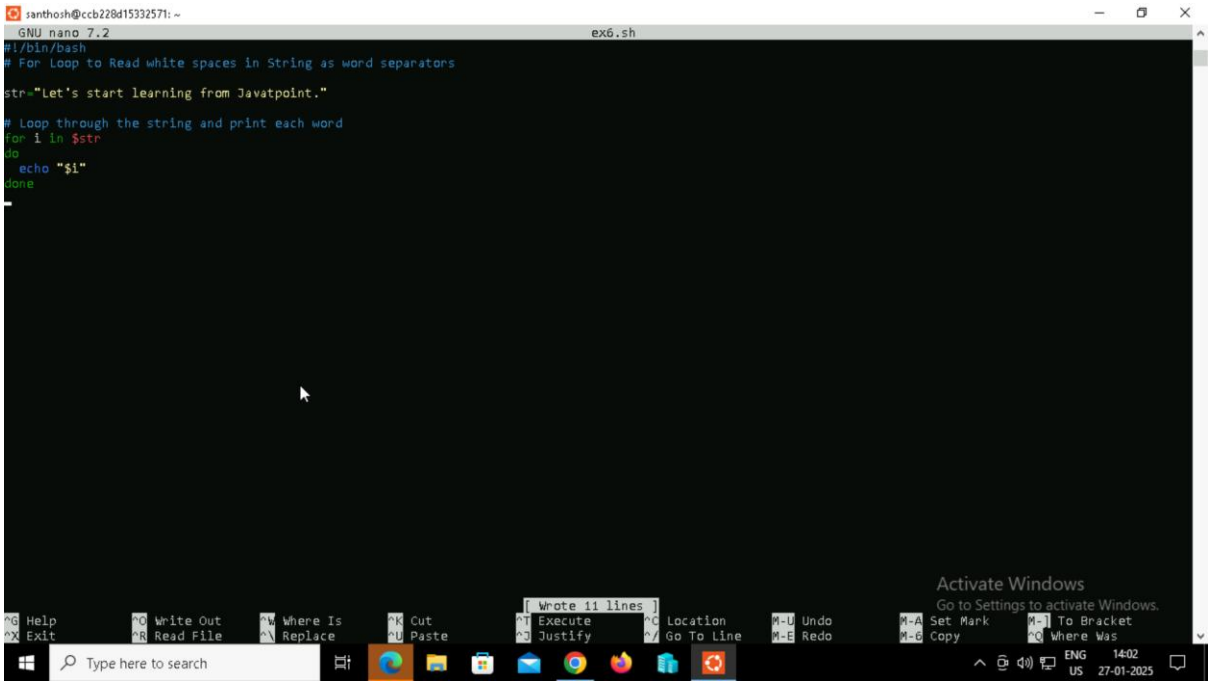
Example 6

For Loop to Read white spaces in String as word separators.

Step 1: Creating a bash script using touch command and adding the script by editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex6.sh
santhosh@ccb228d15332571:~$ nano ex6.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex6.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex6.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex6.sh
Let's
start
learning
from
Javatpoint.
```

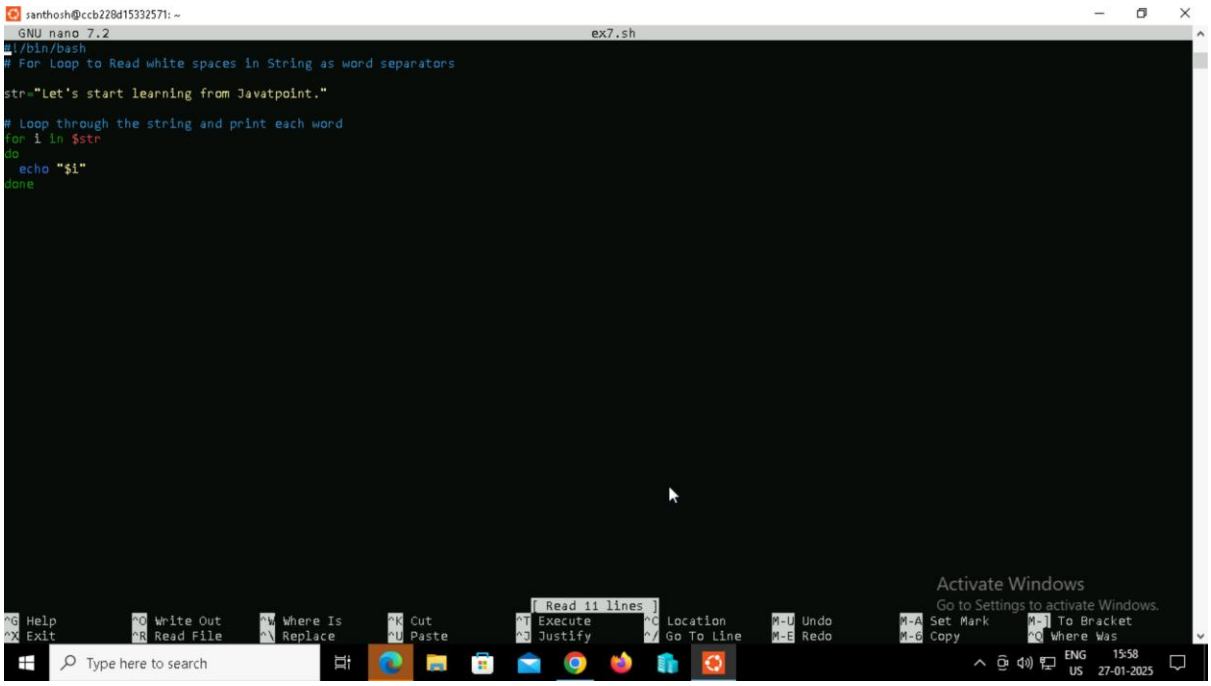
Example 7

For Loop to Read each line in String as a word.

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex7.sh
santhosh@ccb228d15332571:~$ nano ex7.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex7.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex7.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex7.sh
Let's
start
learning
from
Javatpoint.
```

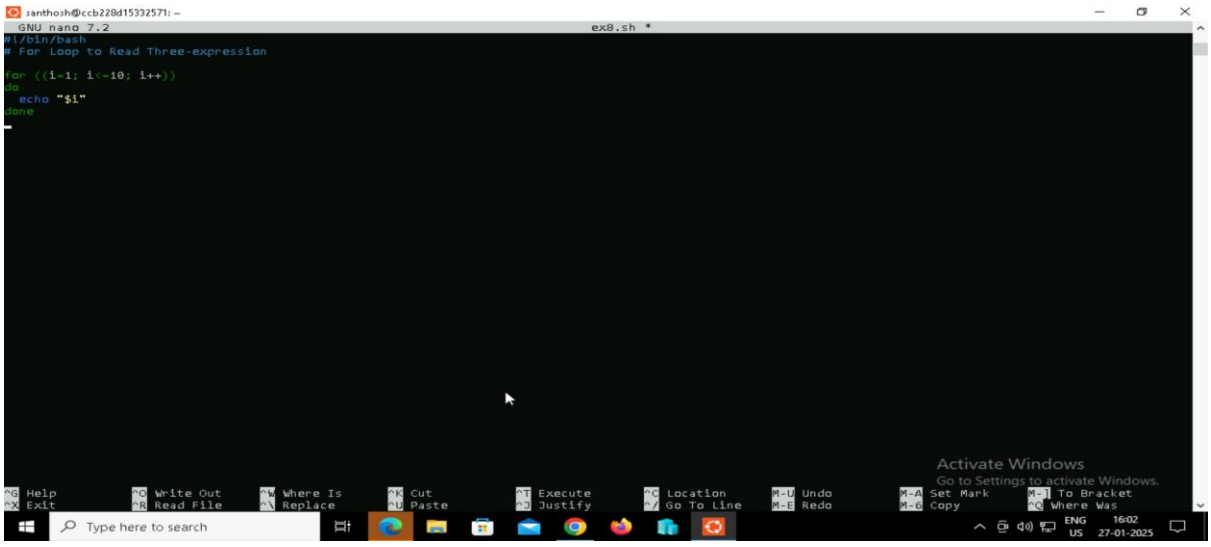
Example 8

For Loop to Read Three-expression

Step 1: Creating a bash script using touch command and adding the script by editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex8.sh
santhosh@ccb228d15332571:~$ nano ex8.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex8.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex8.s
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex8.sh
1
2
3
4
5
6
7
8
9
10
```

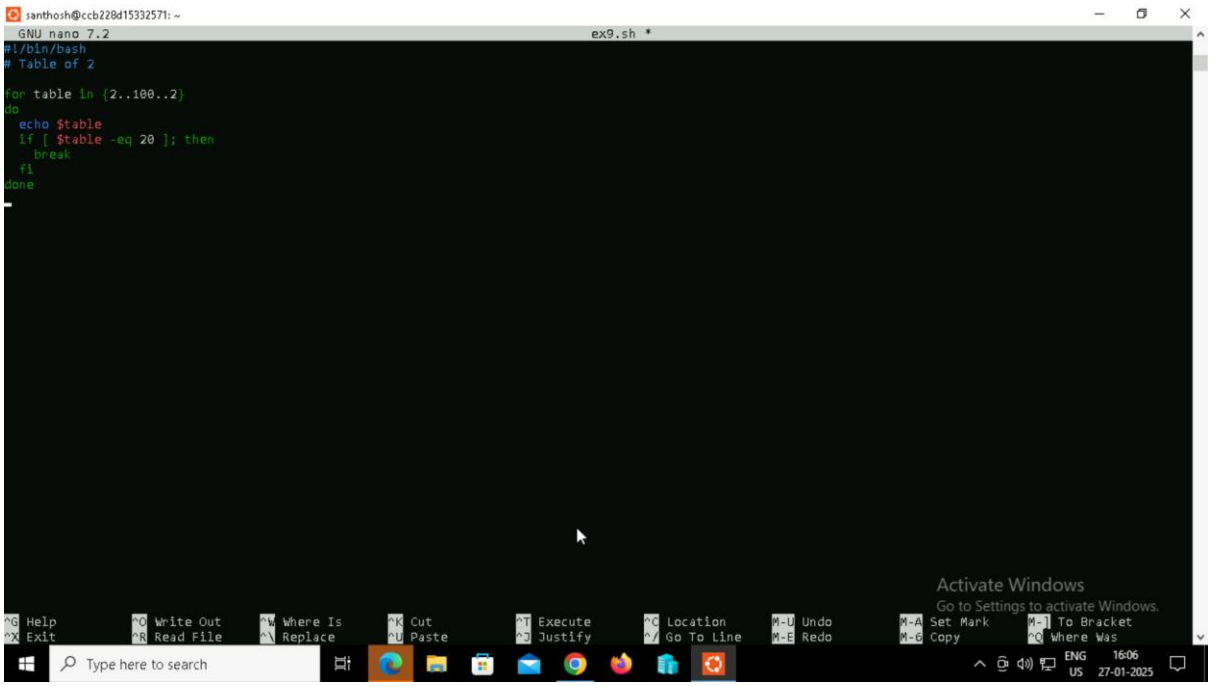
Example 9

For Loop with a Break Statement

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex9.sh
santhosh@ccb228d15332571:~$ nano ex9.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex9.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex.sh
2
4
6
8
10
12
14
16
18
20
```

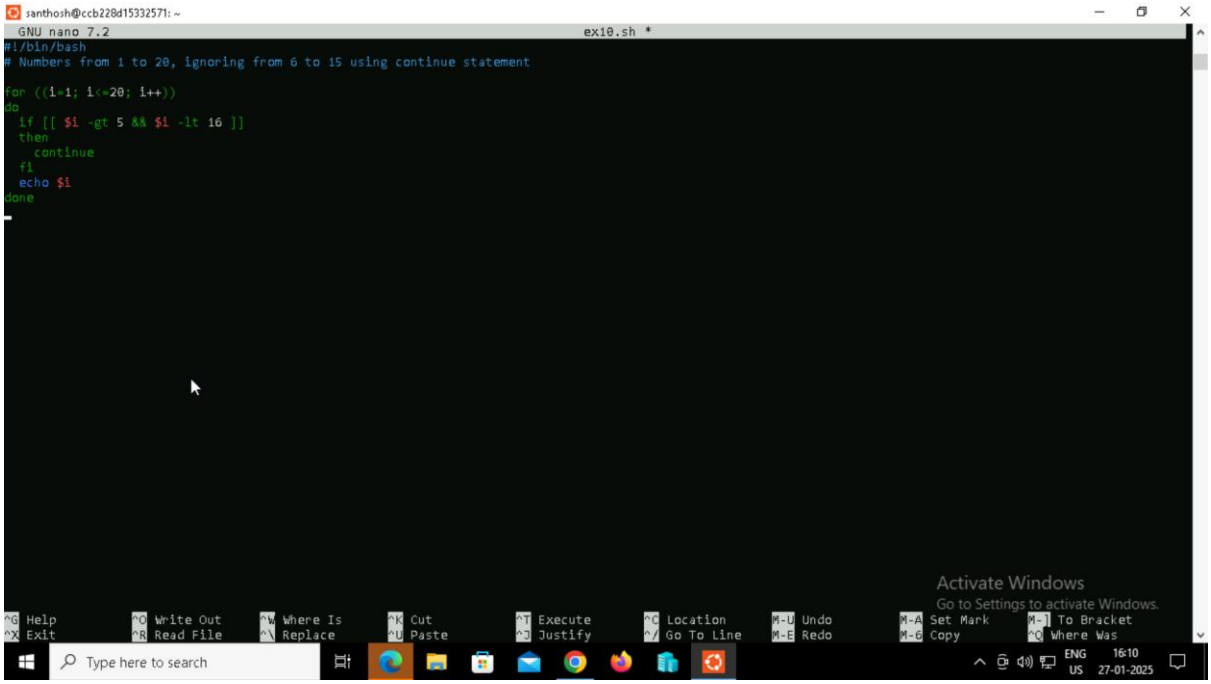
Example 10

For Loop with a Continue Statement

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex10.sh
santhosh@ccb228d15332571:~$ nano ex10.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex10.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex10.sh
1
2
3
4
5
16
17
18
19
20
```

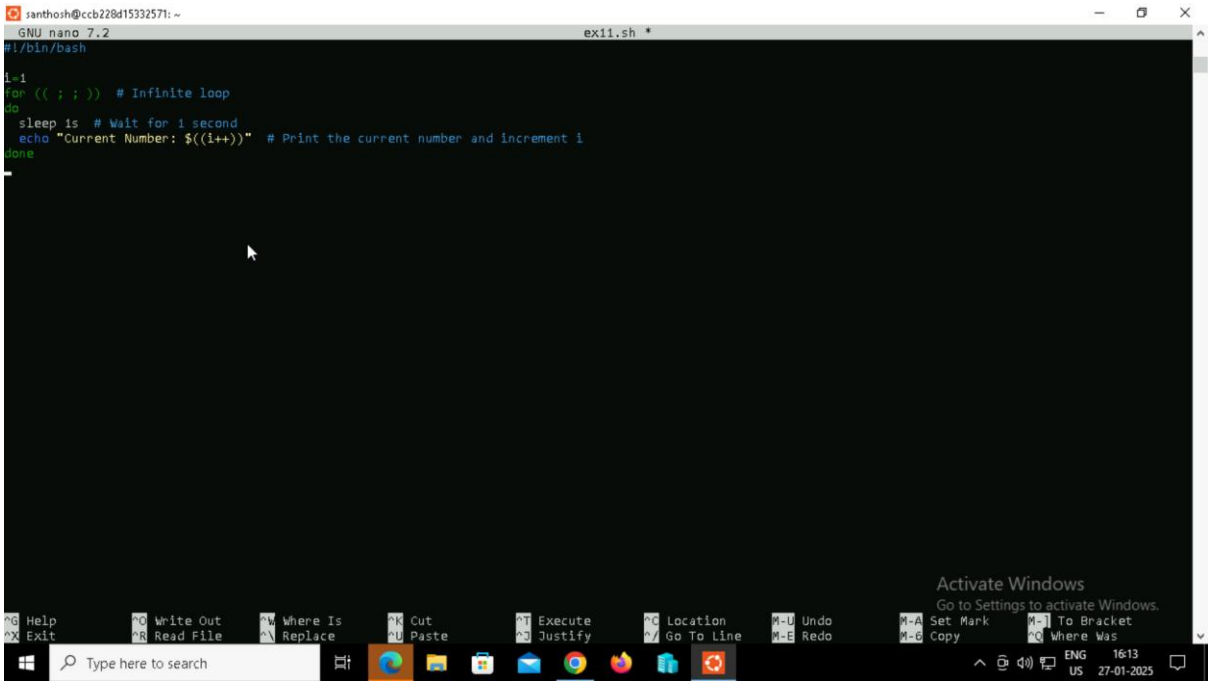
Example 11

Infinite Bash For Loop

Step 1: Creating a bash script using touch command and adding the script bby editing the file using nano command.

```
santhosh@ccb228d15332571:~$ touch ex11.sh
santhosh@ccb228d15332571:~$ nano ex11.sh
```

Step 2: Creating the script for a simple scenario to demonstrate the use of the case statement.



Step 3: Providing the necessary permissions for the ex.sh script.

```
santhosh@ccb228d15332571:~$ chmod +x ex11.sh
```

Step 4: Executing the output.

```
santhosh@ccb228d15332571:~$ ./ex11.sh
Current Number: 1
Current Number: 2
Current Number: 3
Current Number: 4
Current Number: 5
Current Number: 6
Current Number: 7
Current Number: 8
Current Number: 9
Current Number: 10
Current Number: 11
Current Number: 12
Current Number: 13
^C
```