



Subject:	Networking Lab (ITL401)		
Class:	SE IT / Semester – IV (CBCGS) / Academic year: 2017-18		
Name of Student:	Kazi Jawwad A Rahim		
Roll No:	28	Date of performance (DOP) :	
Experiment No:	03	Date of checking (DOC) :	
Title: Introduction to Tcl Hello programming.			
Marks:		Teacher's Signature:	

1. Aim: To Understand and implement Tcl programming.

2. Prerequisites:

Knowledge of

1. Basic concepts of computer programming.
2. Basic understanding of working with test editor and command line.

3. Hardware Requirements:

1. PC with minimum 2GB RAM

4. Software Requirements:

1. Linux (Ubuntu 10.04)
2. ns-2.34 package
3. Text editor

5. Learning Objectives:

1. To get familiar with basics of Tcl language.
2. To understand the working and syntax of basics NS2.

6. Course Objectives Applicable: LO 1, LO 2

7. Program Outcomes Applicable: PO2, PO4

8. Program Education Objectives Applicable: 1

Open a text editor and write the codes there and save it with **.tcl** file extension

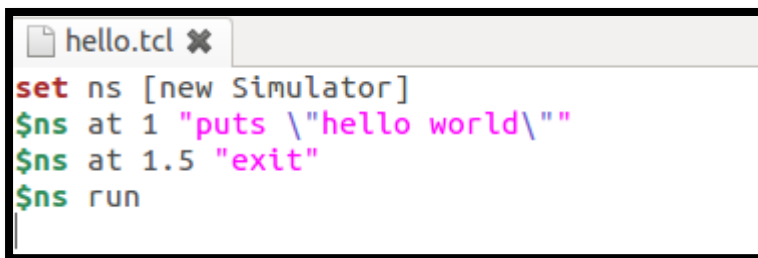
Example: hello.tcl :

SOURCE CODE:

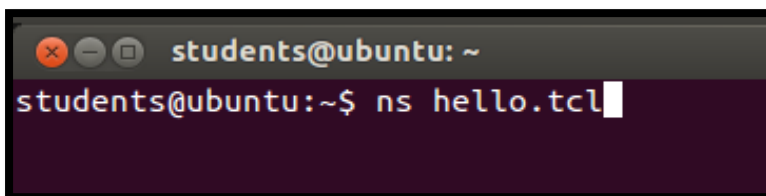
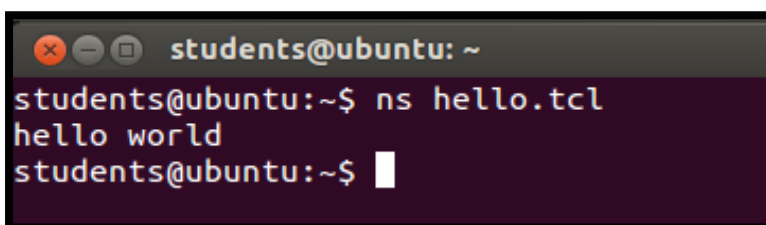
```
set ns [new Simulator]
$ns at 1 "puts \"hello world\""
$ns at 1.5 "exit"
$ns run
```

Open the terminal and execute the hello.tcl by **\$ ns hello.tcl**

OUTPUT:

A screenshot of a text editor window titled 'hello.tcl'. The code inside is:

```
set ns [new Simulator]
$ns at 1 "puts \"hello world\""
$ns at 1.5 "exit"
$ns run
```

A screenshot of a terminal window with the title bar 'students@ubuntu: ~'. The prompt is 'students@ubuntu:~\$' and the command 'ns hello.tcl' has been entered, with a cursor at the end of the line.A screenshot of a terminal window with the title bar 'students@ubuntu: ~'. The prompt is 'students@ubuntu:~\$', the command 'ns hello.tcl' has been entered, and the output 'hello world' has been displayed on the next line. The prompt 'students@ubuntu:~\$' is shown again on the following line.

13. Experiment/Assignment Evaluation

SR	Parameters	Weight	Excellent	Good	Average	Poor	Not as per requirement
		Scale Factor ->	5	4	3	2	0
1	Technical Understanding	25					
2	Performance / Execution	25					
3	Question Answers	20					
4	Punctuality	20					
5	Presentation	10					
	Total out of 100 --> #(to be converted as per term-work evaluation applicable to the subject)		$\Sigma (\text{Weight} * \text{Scale Factor})/5 = \underline{\hspace{2cm}}$				

References:

- [1] <http://www.jgyan.com/ns2/trace%20file.php>
- [2] <https://www.tcl.tk/man/tcl8.5/tutorial/Tcl1.html>
- [3] <http://www.jgyan.com/ns2/link%20command.php>

Viva Questions

1. What is the use of set command in Tcl?
2. What are the benefits of Tcl?