**Case Study**

Programming Case Study – Chef

I have developed a cookbook named “*webapp*” which has necessary configurations to install apache ( httpd ) on respective nodes and display “hello world” home page.

Environment : 2 Centos VMs running inside VirtualBox.

Installed Chef DK on one VM and other is used a client ( target ) node.

There are two recipes - “*web.rb”* and “*web\_user.rb”*

*web.rb* - installed apache, makes necessary config changes, creates document root and home page showing ‘hello world..’

*web\_user.rb* - creates web admin user/group to access this document directory.

A template is created to modify changes in target machine as per requirement.

*metadata.rb* - Includes httpd latest version to be installed from supermarket site.

Used Berks install and berks upload to upload cookbooks to Hosted Chef server.

Other tasks done via ‘knife’ command line options - bootstrapping a node, adding run\_list etc..

Refer - “*webapp*” cookbook for further details.

Programming Case Study – Scripting - 1

Taken a sample log file */var/log/messages* and read it via file “*logmessage.txt*”

Used ‘grep’ ‘uniq’ ‘cut’ commands to filter messages.

Attached shell script - *“parser.sh”* and file “*logmessage.txt*” where it searches and counts messages based on time.

ashutosh@calypso:~/my\_development$ sh parser.sh

minutes, number\_of\_messages

Jan 20 03:25,2

Jan 20 03:26,2

Jan 20 03:30,2

Jan 20 05:03,1

Jan 20 05:20,1

Jan 20 05:22,6

Programming Case Study – Monitoring (System Design)

Please refer to presentation - “*Workflow\_Diagram”*

Programming Case Study – Language - 1

Please refer the Python code - “*absolute\_diagonal.py*”

ashutosh@calypso:~/my\_development$ python absolute\_diagonal.py   
Sum of absolute diagonal is: 15