



## 19CS405 – Operating Systems

<b>Topic #1</b>	Basics of Shell Scripting
<b>Overview of the Topic #1</b>	<p><b>Shell programming</b> is a group of commands grouped together under single filename.</p> <p>After logging onto the system a prompt for input appears which is generated by a Command String Interpreter program called the shell. The shell interprets the input, takes appropriate action, and finally prompts for more input.</p> <p>The shell can be used either interactively - enter commands at the command prompt, or as an interpreter to execute a shell script. Shell scripts are dynamically interpreted, NOT compiled. Common Shells.</p> <ul style="list-style-type: none"><li>• C-Shell - csh : The default on teaching systems Good for interactive systems Inferior programmable features</li><li>• Bourne Shell - bsh or sh - also restricted shell - bsh : Sophisticated pattern matching and file name substitution</li><li>• Korn Shell : Backwards compatible with Bourne Shell Regular expression substitution emacs editing mode</li><li>• Thomas C-Shell - tcsh : Based on C-Shell Additional ability to use emacs to edit the command line Word completion &amp; spelling correction Identifying your shell.</li></ul> <p>SHELL KEYWORDS : echo, read, if fi, else, case, esac, for , while , do , done, until , set, unset, readonly, shift, export, break, continue, exit, return, trap , wait, eval ,exec, ulimit , umask.</p>
<b>Teaching Method</b>	Additional Lab program on basics of shell scripting
<b>Proof for the activity</b>	<a href="#">Click Here</a>
<b>Feedback from the students about the activity and Knowledge gained</b>	The students understood the basics of shell scripting and can write small scripts to perform operating system functions.
<b>Outcome of the activity</b>	Students have gained knowledge on the basics of the various shell programming features thereby enabling them to perform small operating system functions.

<b>Topic #2</b>	Recent Trends in Android Development
<b>Overview of the Topic #2</b>	<p>Unit V of the syllabus covers few of the predominant operating systems. The students have been taught the full functionality of iOS and Android OS. This topic covers the steps involved in creating a simple mobile application using Android OS.</p> <p>Three video lectures have been shared</p> <p>Three video lectures describing the step by step procedure to create mobile apps have been shared with the students.</p>
<b>Teaching Method</b>	Demo videos on Mobile Application Development
<b>Proof for the activity</b>	<a href="#">Click Here</a>
<b>Feedback from the students about the activity and Knowledge gained</b>	The students understood the step-by-step procedure to create mobile apps and have tried to implement the same on their mobile phones.
<b>Outcome of the activity</b>	Students have gained knowledge on the various types of operating systems and the step-by-step procedure to create mobile applications.