**Shell Scripting Basics**

* A shell script is a program that begins with a “shebang” directive
* Shell scripts are used to run commands and programs
* Scripting languages are interpreted, not compiled
* Compiled languages faster but require longer time

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Description automatically generated**Filters, Pipes and Variables**

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  Description automatically generated| -> pipe command
* Shell variables:

+ Define shell variables: varname = value

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* Environment variables -> Extend scope

export var\_name

**Useful features of Bash shell**

* # -> comment
* ; -> command separator
* \* -> filename expansion wildcard
* ? -> single character wildcard in filename expansion
* \ -> escape unique character interpretation
* > -> Redirect output to the file
* >> -> Append output to the file
* 2> -> Redirect standard error file
* 2 >> -> Append std error file
* < -> Redirect file contents to standard input
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  Description automatically generatedBatch mode: Run commands sequentially

Command1, command2

* Concurrent mode: Commands run in parallel

Command 1 & command 2

**Advanced bash scripting**

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  Description automatically generatedConditionals: if – then – else syntax
* Logical operators: “==”, “!=”
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  Description automatically generatedA screenshot of a phone

  Description automatically generatedArithmetic calculations: Every calculations must be put inside $(()) - Array:

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Description automatically generated Indexing similar to array in python