BASH Conditionals Cheatsheet

Mathematical comparisons		
Function	[[ ]]	(( ))
Equal to	if [[5 -eq 6]]	if ((5 = 5))
Not equal to	if [[5 -ne 6]]	if ((5 != 5))
Less than	if [[5 -lt 6]]	if ((5 = 5))
Less than or equal to	if [[5 -le 6]]	if ((5 <= 5))
Greater than	if [[5 -gt 6]]	if ((5 > 5))
Greater than or equal to	if [[5 -ge 6]]	if ((5 >= 5))

String Comparisons	
Function	Examples
Is string1 equal to string2?	if [[string1 = string2]]
Is string1 NOT equal to string2?	if [[string1 != string2]]
Does string1 match a wildcard?	if [[string1 == string2*]]
Does string1 match a regular expression?	If [[string1.tar =~ 1.tar$]]
Is variable VAR zero length (empty)?	if [[-z $VAR]]

File/dir types	
Function	Examples
Does file/dir exist?	if [[-e /dir/file.txt]]
Does file have size?	if [[-s /dir/file.txt]]
Does file exist?	if [[-f /dir/file.txt]]
Does directory exist?	if [[-d /dir]]
Is file writable?	if [[-w /dir/file.txt]]
Is file readable?	if [[-r /dir/file.txt]]
Is file executable?	if [[-x /dir/file.txt]]

Compound Comparisons		
Logical Operator	Examples	
Logical NOT	if ! [-e file] && [-x file]	if ! [[-e file && -x file]]
Logical AND	if [-e file] && [-x file]	if [[-e file && -x file]]
Logical OR	if [-r file] || [-x file]	If [[-r file || -x file]]