**Basic Shell Scripting**

1. **Shell Basics**
   1. Types of shells
   2. Shell functionality
   3. Environment
2. **Writing first script**
   1. Writing script & executing basic script
   2. Debugging script
   3. Making interactive scripts
   4. Variables (default variables)
   5. Mathematical expressions
3. **Conditional statements**
   1. If-else-elif
   2. Test command
   3. Logical operators-AND,OR,NOT
   4. ase –esac
4. **Loops**
   1. While
   2. For
   3. Until
   4. Break & continue
5. **Command line arguments**
   1. Positional parameters
   2. Set & shift
   3. IFS
   4. Break & continue
6. **Functions & file manipulations**
   1. Processing file line by line
   2. Functions
7. **Regular Expression & Filters**
   1. What is regular expression
   2. Grep,cut ,sort commands
   3. Grep patterns
8. **SED & AWK**
9. **Processes**
   1. Concept of process in Unix
   2. Background processes
   3. Scheduling processes -At, batch & Cron
10. **Misc**
    1. Trapping signals
    2. String substitutions / manipulations

**Advanced Shell Scripting**

1. **Advanced Scripting  Techniques**
   1. Providing  command line options to scripts
   2. Shell & subshells
   3. Exporting variables
   4. Arrays
   5. Remote shell execution
   6. Dialog boxes
2. **SQL with Shell**
   1. Connecting to MySQL using shell
   2. Running SQL queries from a shell script
3. **Essential System Administration jobs (on AIX, Solaris & Linux)**
   1. Managing disk space/file system
   2. Startup-Shutdown scripts
   3. Backup-cpio-tar
   4. Monitoring , health check

#!/bin/bash

echo "show all tables"

mysql -uroot -p'password' dbname<<EOFMYSQL

show tables;

EOFMYSQL

echo "Count of all records"

mysql -uroot -p'password' dbname<<EOFMYSQL

select count(\*) from tbname;

EOFMYSQL

# MYSQL CONFIG VARIABLES

$platform = "mysql";

$host = "<your db server ip>";

$database = "<db name>";

$org\_table = "<table name>";

$user = "<username>";

$pw = "<password>";

# DATA SOURCE NAME

$dsn = "dbi:$platform:$database:$host:$port";

#!bin/bash

query="update table\_name set colume ='i' where column\_name is NOT NUll"

mysql -u username -p password mysql -e "$query";

# PERL DBI CONNECT

$connect = DBI->connect($dsn, $user, $pw);

#!/bin/sh

df -H | grep -vE '^Filesystem|tmpfs|cdrom' | awk '{ print $5 " " $1 }' | while read output;

do

echo $output

usep=$(echo $output | awk '{ print $1}' | cut -d'%' -f1 )

partition=$(echo $output | awk '{ print $2 }' )

if [ $usep -ge 90 ]; then

echo "Running out of space \"$partition ($usep%)\" on $(hostname) as on $(date)" |

mail -s "Alert: Almost out of disk space $usep%" you@somewhere.com

fi

done

#!/bin/sh

warninglimit=500000

lowlimit=250000

filesystems="/export/data /export/home /"

for fs in $filesystems

do

size=`df -k $fs|grep $fs|awk '{ print $4; }'`

if [ $size -le $lowlimit ]

then

mailx -s "URGENT: Low disk space for $fs ($size)"

break

fi

if [ $size -le $warninglimit ]

then

mailx -s "WARNING: Low disk space for $fs ($size)"

fi

done