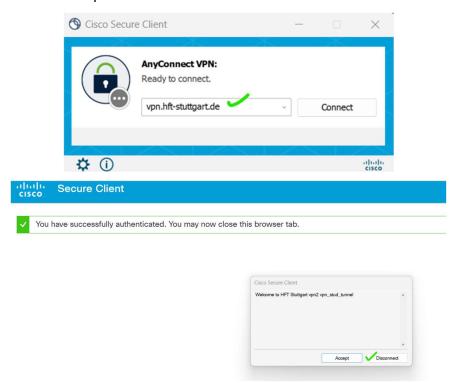
Steps to connect to the LIDA server

1. Download VPN Client from here

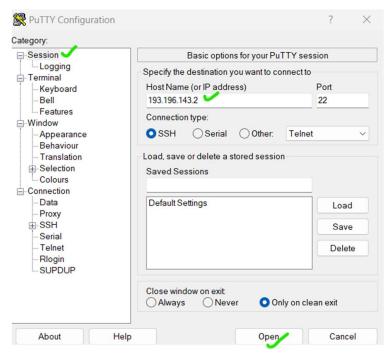
VPN client download / instructions / access points



2. Install the file and open Cisco Connect:







4. Enter the login details – hft user id and hft password

- 5. Enter the command: mysql -h 193.196.143.168 -u dk4s 41kusa1mst -p
- 6. Enter password: bitteaendern

```
41kusalmst@c-143-002:~$ mysql -h 193.196.143.168 -u dk4s_41kusalmst -p

Enter password:

Welcome to the MySQL monitor. Commands end with; or \g.
Your MySQL connection id is 1492982
Server version: 8.0.33 MySQL Community Server - GPL

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> []
```

Author: Sanjay Prabhu Kunjibettu

Course: DBS

7. MySQL Command: show databases;

8. MySQL Command: use dk4s_41kusa1mst

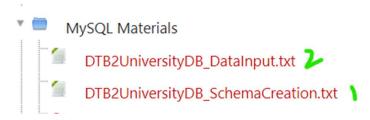
```
mysql> use dk4s_41kusalmst;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> [
```

9. MySQL Command: show tables;

```
mysql> show tables;
Empty set (0,01 sec)
mysql> []
```

10. Download these two files from Moodle.



- 11. Copy and paste both the .txt texts into mysql (Shift + Insert).
- 12. Open a new PuTTy window.
- 13. Create a new folder, say, 'Ryan_Gosling' and cd into it

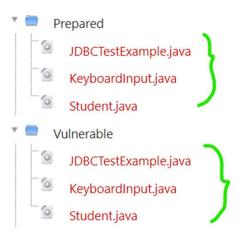
```
41kusa1mst@c-143-002:~/Ryan_Gosling

41kusa1mst@c-143-002:~$ mkdir Ryan_Gosling

41kusa1mst@c-143-002:~$ cd Ryan_Gosling/

41kusa1mst@c-143-002:~/Ryan_Gosling$
```

14. Download any three files from the Moodle:



- 15. Terminal Command: `emacs KeyboardInput.java`
- 16. You are inside the weird terminal now.
- 17. Copy and paste (Shift + Insert) the KeyboardInput.java code here.
- 18. CTRL+X CTRL+S to save it
- 19. CTRL+X CTRL+C to exit from the file
- 20. Repeat Steps 15-10 to create a Student.java file.

21. Compile and run the Student.java file

```
41kusa1mst@c-143-002:~/Ryan_Gosling

41kusa1mst@c-143-002:~$ mkdir Ryan_Gosling

41kusa1mst@c-143-002:~$ cd Ryan_Gosling/

41kusa1mst@c-143-002:~/Ryan_Gosling$ emacs KeyboardInput.java

41kusa1mst@c-143-002:~/Ryan_Gosling$ emacs Student.java

41kusa1mst@c-143-002:~/Ryan_Gosling$ javac Student.java

41kusa1mst@c-143-002:~/Ryan_Gosling$ javac Student.java

41kusa1mst@c-143-002:~/Ryan_Gosling$ java Student.java

MySQL login: dk4s_41kusa1mst

Password:

Exception in thread "main" java.sql.SQLException: No suitable driver found for j

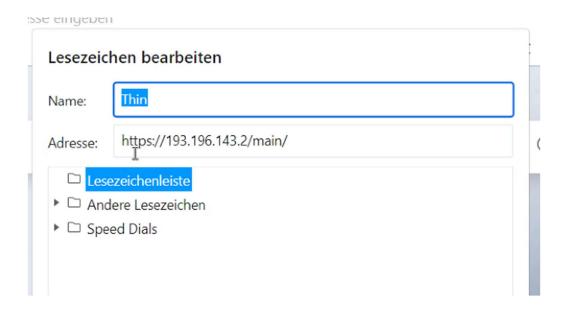
dbc:mysql://193.196.143.168/koch_universitydb

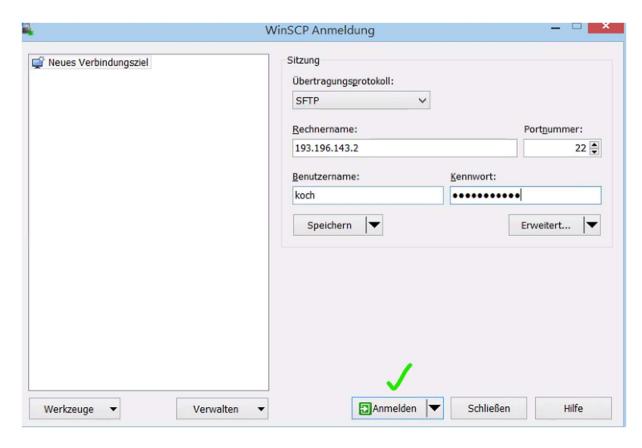
at java.sql/java.sql.DriverManager.getConnection(DriverManager.java:708)

at java.sql/java.sql.DriverManager.getConnection(DriverManager.java:230)

at Student.main(Student.java:23)

41kusa1mst@c-143-002:~/Ryan_Gosling$ []
```





22. Open Apache Netbeans.

```
Connection conn = DriverManager.getConnection(
    "jdbc:mysql://193.196.143.168/dk4s_41kusalmst", "dk4s_41kusalmst", "bitteaendern"
);
```

- 23. Add the mysql .jar driver in the "Libraries".
- 24. Run the project.

FAQ

- 1. Zombie processes
 - a. Dead Process running in main memory

```
riess
koch@c-143-002:~$ !ps
        3278872 0.0
3279078 0.0
ps auxf
                              17216 10988 ?
                                                                         \_ sshd: koch [priv]
                                                          10:18
                                                                  0:00
root
                        0.0
                                                                              \_ sshd: koch@pts/37
                        0.0
                              17548
                                     8680 ?
                                                                   0:00
koch
                                                          10:19
                                                                                  \_ -bash
         3279081
                   0.0
                        0.0
                              14100
                                      6932 pts/37
koch
                                                          10:19
         3285743
                   0.0
                        0.0
                              30028 14692 pts/37
                                                                   0:00
                                                                                      \ mysql -h 193.196.143.168 -u k
och -p
         3320177
                              18732
                                                          10:42
                                     8084 pts/37
                                                                   0:00
koch
                   0.0
                        0.0
                                                                                      \_ ps auxf
                                                                                      _ grep --color=auto koch
                        0.0
                                     2408 pts/37
koch
         3320178
                   0.0
                               9476
                                                    S+
                                                          10:42
                                                                   0:00
         3320179
                   0.0
                        0.0
                               8960
                                     1300 pts/37
                                                          10:42
                                                                   0:00
                                                                            \_ more
sshd: koch [priv]
koch
root
                        0.0
                                                    Ss
koch
         3296384
                   0.0
                        0.0
                              17396
                                     8752 ?
                                                          10:26
                                                                   0:00
                                                                             \_ sshd: koch@pts/41
koch
         3296385
                   0.0
                        0.0
                              14232
                                     7108 pts/41
                                                    Ss+
                                                          10:26
                                                                   0:00
                                                                                    -bash
                                                                   0:00 /lib/systemd/systemd --user
                        0.0
         3279004
                   0.0
                              18240 10888 ?
koch
                                                    Ss
                                                          10:19
         3279005
                  0.0
                        0.0 172812
                                     6944 ?
                                                          10:19
                                                                  0:00
koch
                                                                            (sd-pam)
                                                    S
         3279014
                   0.0
koch
                       0.0
                              41868
                                                    Ssl
                                                          10:19
                                                                            /usr/bin/pipewire
         3279015
                  0.0
                       0.0
                             26052
                                     7872 ?
                                                          10:19
                                                                   0:00
                                                                            /usr/bin/pipewire-media-session
                                                                         \_ /usr/bin/pipewire-media-sessio..
\_ /usr/bin/pulseaudio --daemonize=no --log-
koch
         3279016
                  0.0
                        0.0 299224 24760 ?
                                                    Ssl
                                                          10:19
                                                                  0:00
target=iournal
```

Author: Sanjay Prabhu Kunjibettu

```
koch@c-143-002:~$ ps -ef | grep koch | more
                   9889 0 10:18 ?
                                             00:00:00 sshd: koch [priv]
root
          3278876
                      1 0 10:19 ?
koch
                                             00:00:00 /lib/systemd/systemd --user
         3279005 3279004 0 10:19 ?
3279014 3279004 0 10:19 ?
                                             00:00:00 (sd-pam)
koch
                                             00:00:00 /usr/bin/pipewire
koch
         3279015 3279004 0 10:19 ?
koch
                                             00:00:00 /usr/bin/pipewire-media-session
koch
         3279016 3279004 0 10:19 ?
                                             00:00:00 /usr/bin/pulseaudio --daemonize=no --log-
koch
          3279056 3279004 0 10:19 ?
                                             00:00:00 /usr/bin/dbus-daemon --session --address=
-nopidfile --systemd-activation --syslog-only
          3279078 3278876 0 10:19 ?
                                             00:00:00 sshd: koch@pts/37
         3279081 3279078 0 10:19 pts/37
3285743 3279081 0 10:22 pts/37
                                             00:00:00 -bash
koch
                                             00:00:00 mysql -h 193.196.143.168 -u koch -p
koch
                     9889 0 10:26 ?
                                             00:00:00 sshd: koch [priv]
root
          3296130
          3296384 3296130 0 10:26 ?
                                             00:00:00 sshd: koch@pts/41
koch
koch
          3296385 3296384 0 10:26 pts/41
                                             00:00:00 -bash
         3327049 3279081 0 10:47 pts/37 00:00:00 ps -ef
koch
```

procent process

pi Kasen

```
koch@c-143-002:~$ kill -9 3327051
-bash: kill: (3327051) - Kein passender Prozess gefunden
koch@c-143-002:~$ ps -ef | grep koch | more
        3278876 9889 0 10:18 ?
root
                                          00:00:00 sshd: koch [priv]
        3279004 1 0 10:19 ?
3279005 3279004 0 10:19 ?
                                          00:00:00 /lib/systemd/systemd --user
koch
                                          00:00:00 (sd-pam)
koch
                                          00:00:00 /usr/bin/pipewire
koch
        3279014 3279004 0 10:19 ?
koch
        3279015 3279004 0 10:19 ?
                                          00:00:00 /usr/bin/pipewire-media-session
        3279016 3279004 0 10:19 ?
                                          00:00:00 /usr/bin/pulseaudio --daemonize=no --log-target
koch
        3279056 3279004 0 10:19 ?
                                          00:00:00 /usr/bin/dbus-daemon --session --address=system
-nopidfile --systemd-activation --syslog-only
        3279078 3278876 0 10:19 ?
                                          00:00:00 sshd: koch@pts/37
koch
                                          00:00:00 -bash
koch
        3279081 3279078 0 10:19 pts/37
        3285743 3279081 0 10:22 pts/37
                                          00:00:00 mysql -h 193.196.143.168 -u koch -p
koch
                    9889
                                          00:00:00 sshd: koch [priv]
root
        3296130
                         0 10:26 ?
        3296384 3296130 0 10:26 ?
koch
                                          00:00:00
                                                   sshd:
                                                          kochepts/41
        329638$ 3296384 0 10:26 pts/41
3330436 3296365 4 10:49 pts/41
                                          00:00:00 -bash
koch
                                          00:00:00 emacs
                                                          Student.java
koch
        3330731 3279081
                                          00:00:00 ps -ef
koch
                         0 10:49 pts/37
        3330732 3279081 0 10:49 pts/37
3330733 3279081 0 10:49 pts/37
koch
                                          00:00:00 grep --color=auto koch
                                          00:00:00 more
koch@c-143-002:~$ kill 3330476
mysql>
[1] +
        Angehalten
                                                mysql -h 193.196.1
koch@c-143-002:~$ ps auxf | grep koch | more
              3278876 0.0 0.0 17216 10988 ?
root
h [priv]
```

- > ps auxf | more
- grep commands create processes

koch@c-143-002:~\$ pwd

/tank/home/koch

koch@c-143-002:~\$ echo \$SHELL



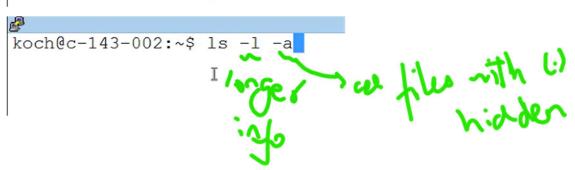
koch@c-143-002:~\$ echo SHELL

SHELL

koch@c-143-002:~\$ echo \$SHELL

/bin/bash

koch@c-143-002:~\$



BASH – Born Again Shell

.bashrc

- system config file
- rc stands for resource configurator
- set of commands executed when a new shell is opened
- useful for alias

```
koch@c-143-002: ($ alias
alias a2pszwei='a2ps -r --columns=2 -j -i -b -o'
alias alert='notify-send --urgency=low -i "$([ $? = 0 ] && echo term:
-e '\''s/^\s*[0-9]\+\s*//;s/[;&|]\s*alert$//'\'')"'
alias atops='~/bin/a2ps -nP -1 -nd -nL -p -q -s -nH'
alias atops2='~/bin/a2ps -nP -2 -nd -nL -l -q -s -nH'
alias c='clear'
alias egrep='egrep --color=auto'
alias fgrep='fgrep --color=auto'
alias grep='grep --color=auto'
alias h='history 24'
alias kochmysql='mysql -h 193.196.143.168 -u koch -p'
alias kochmysql2='mysql -h 193.196.143.168 -u koch -p'
alias kochrapid='/opt/rapidminer-studio/RapidMiner-Studio.sh'
alias l='ls -CF'
alias la='ls -A'
alias ll='ls -a -l'
alias ls='ls --color=auto'
alias newterm='xwsh -fg black -bg aliceblue -geometry 100x50 &'
alias rapid='java -jar ~koch/Rapid/rapidminer/lib/rapidminer.jar'
alias rdesk='rdesktop -u student -f 193.196.141.10:10040'
```