Software Engineering Tools Lab
Assignment No-6

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Batch: T6

Q 1. What is Microsoft's VSS? Provide the information of VSS tool with respect to below points.

a. **Owner/ developer**
b. **Brief information/introduction**
c. **Basic operations involved**
d. **Advantages**
e. **Disadvantages**

Solution:

a. Owner/developer: Microsoft Corporation

b. Brief information/introduction: Microsoft's Volume Shadow Copy Service (VSS) is a built-in Windows feature that enables backup and restore operations by creating consistent, point-in-time copies of data. It is an API (Application Programming Interface) that allows third-party software to interact with the operating system's built-in backup infrastructure. VSS is designed to create snapshots of disk volumes on a Windows computer, while the system continues to run and modify data.

c. Basic operations involved: The basic operations involved in using VSS include:

- Requesting a shadow copy of a volume: Applications that use VSS send a request to the operating system for a shadow copy of a specific volume.
- Preparing for the snapshot: The VSS service coordinates with the applications that are using the volume to ensure that all the data is in a consistent state before the snapshot is taken.

- Creating the snapshot: Once all the data is in a consistent state, VSS creates a snapshot of the volume. This snapshot is a read-only copy of the volume at a specific point in time.
- Using the snapshot: The applications that requested the shadow copy can then use the snapshot to perform backup and restore operations.

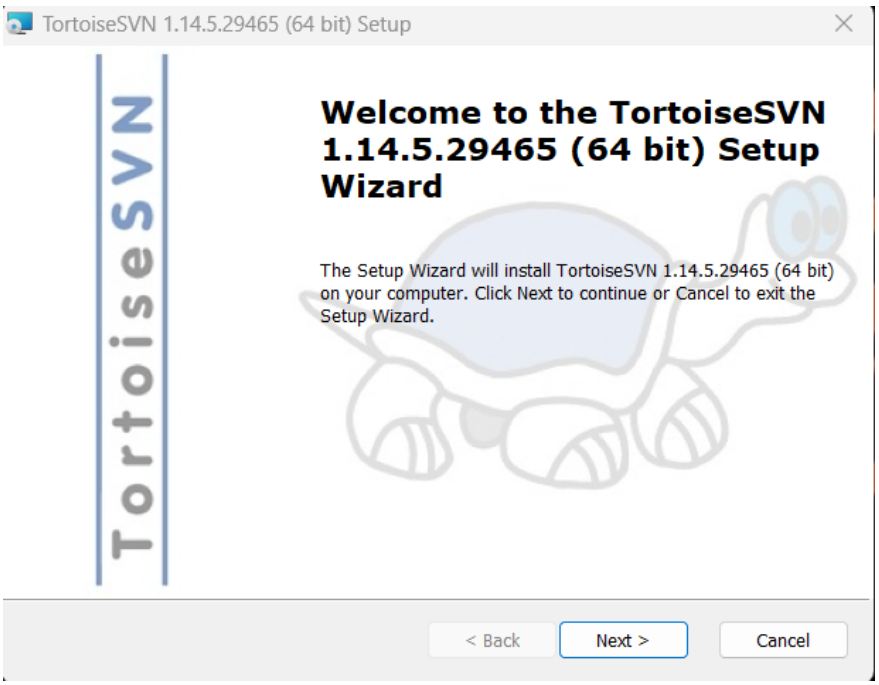
d. Advantages: VSS has several advantages, including:
- Consistent backups: VSS ensures that all data is in a consistent state before the snapshot is taken, which helps ensure that backups are reliable and accurate.
- Low impact on system performance: Because VSS creates snapshots of volumes while the system is running, it has a low impact on system performance.
- Support for third-party software: VSS is an open API, so third-party backup and restore software can use it to create consistent, point-in-time copies of data.

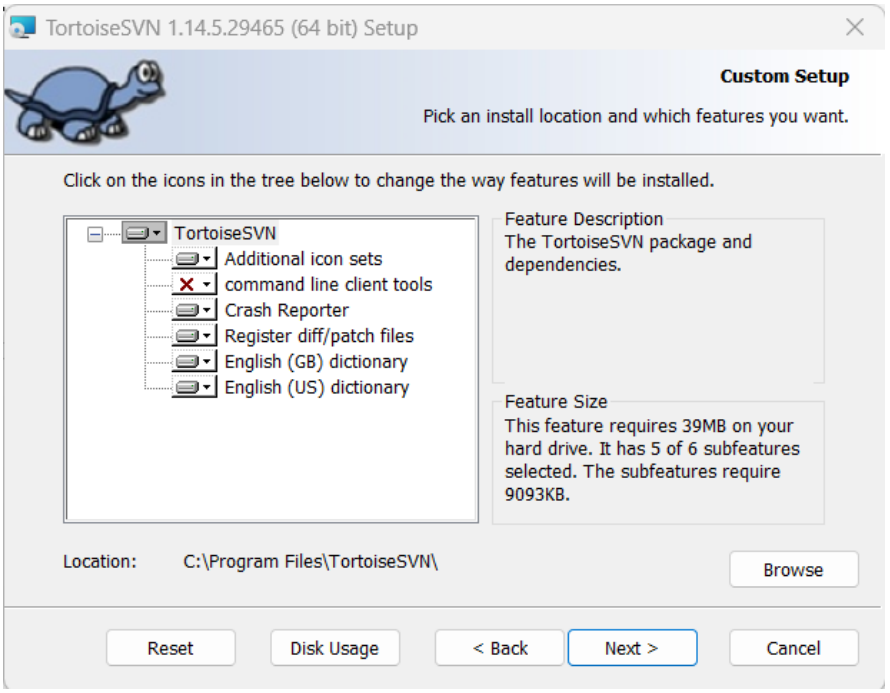
e. Disadvantages: VSS has a few potential disadvantages, including:
- Limited support for non-Windows platforms: VSS is a Windows-specific feature and is not available on other platforms.
- Limited control over backups: VSS provides a limited level of control over the backup process, which may not be sufficient for some users or applications.
- Possible impact on disk space: VSS snapshots can use a significant amount of disk space, which may be a concern for systems with limited storage capacity.

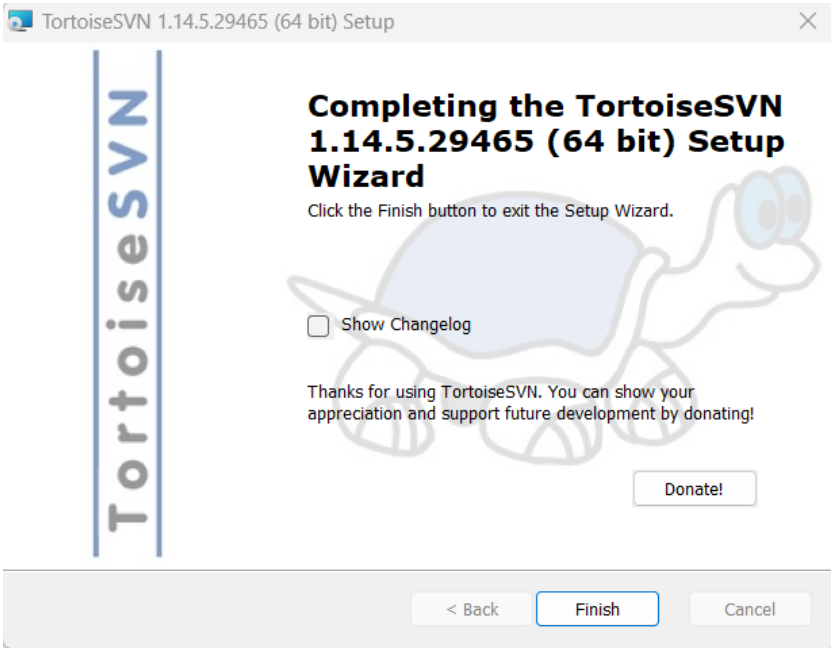
Q 2. Create a SVN repository and perform below operations on that repository using SVN. Also explain below operations.

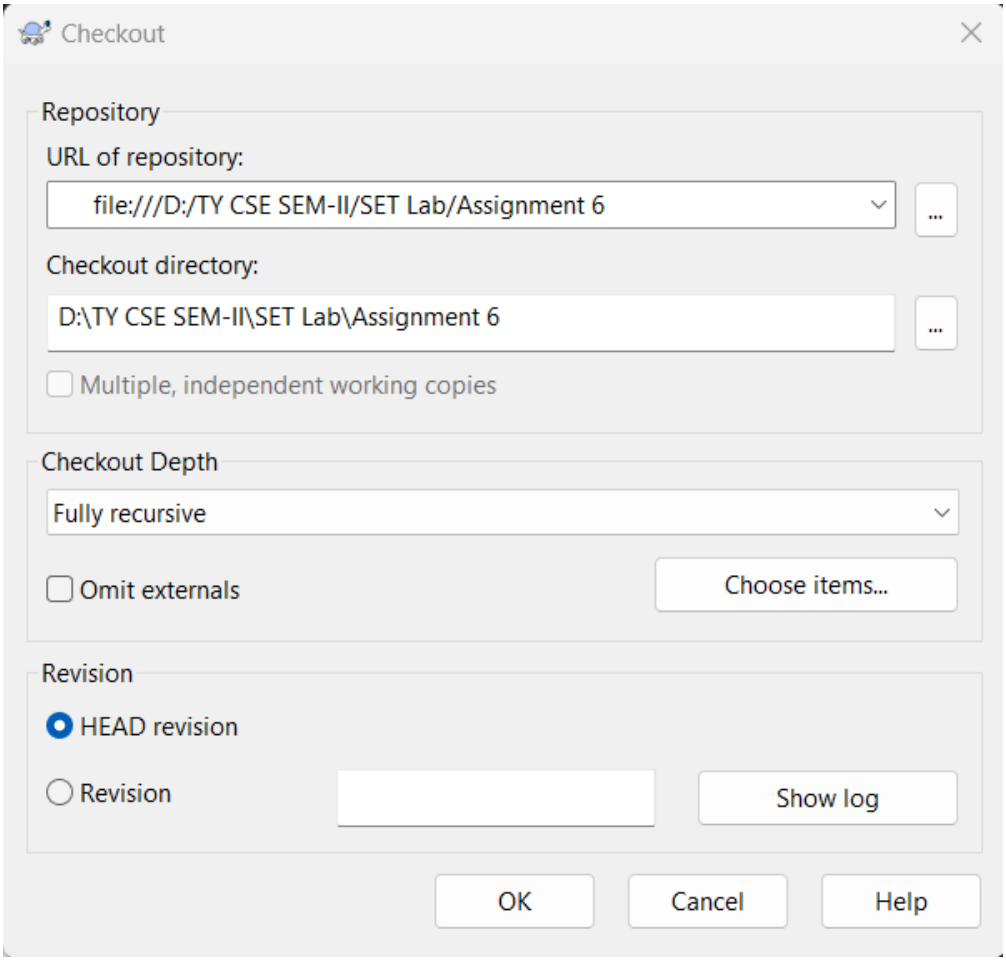
a. Revert
b. Import
c. Checkout
d. Commit
e. Update
f. Copy

Solution:

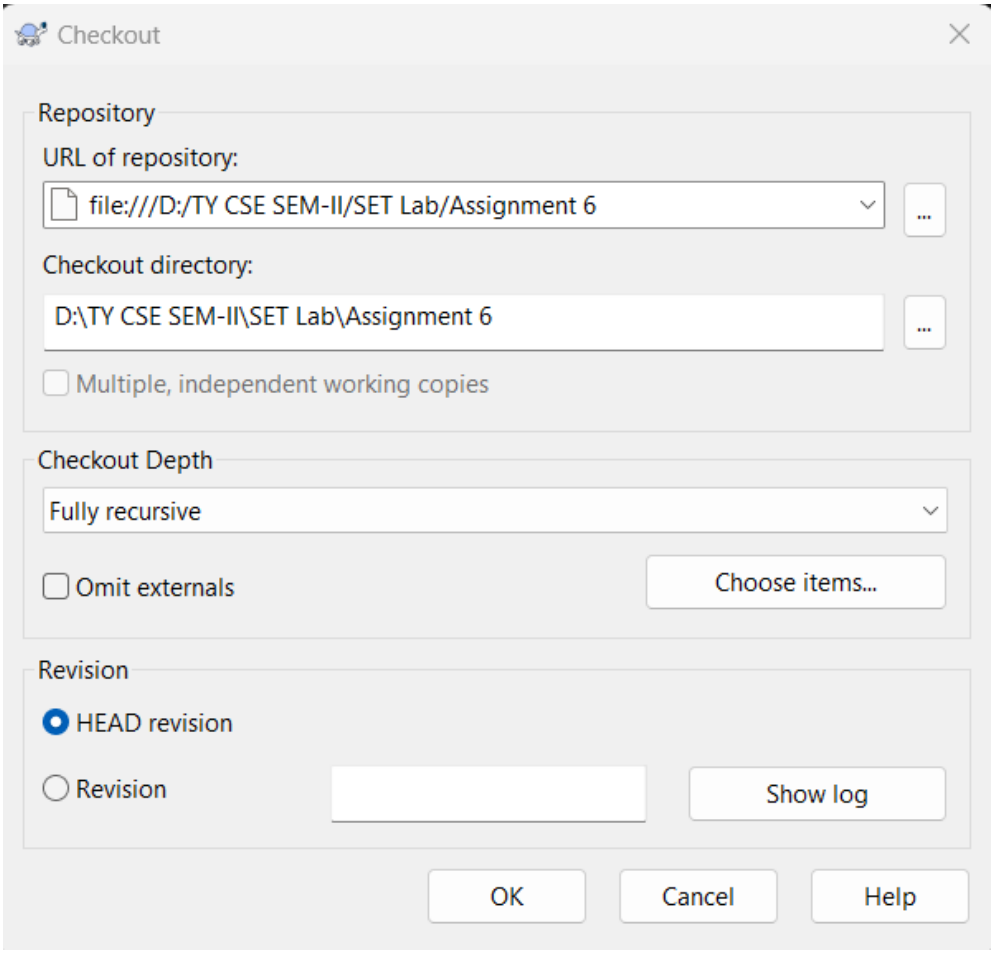

TortoiseSVN 1.14.5.29465 (64 bit) Setup
TortoiseSVN
Welcome to the TortoiseSVN 1.14.5.29465 (64 bit) Setup Wizard
The Setup Wizard will install TortoiseSVN 1.14.5.29465 (64 bit) on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
< Back
Next >
Cancel

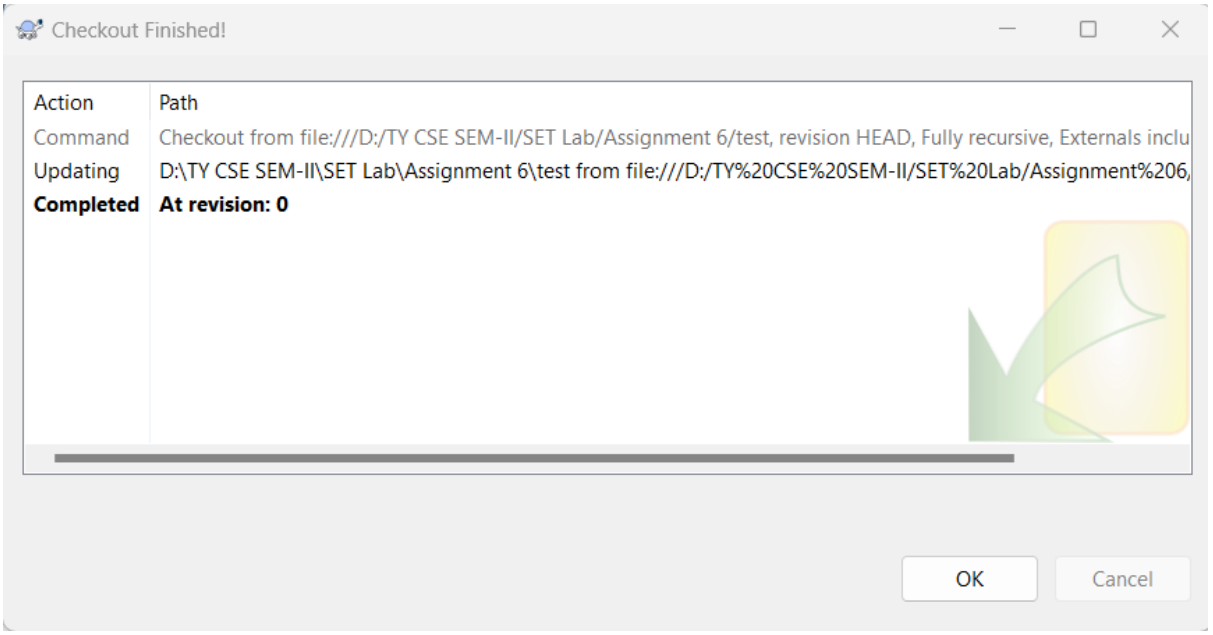

TortoiseSVN 1.14.5.29465 (64 bit) Setup
Custom Setup
Pick an install location and which features you want.
Click on the icons in the tree below to change the way features will be installed.
TortoiseSVN
Additional icon sets
command line client tools
Crash Reporter
Register diff/patch files
English (GB) dictionary
English (US) dictionary
Feature Description
The TortoiseSVN package and dependencies.
Feature Size
This feature requires 39MB on your hard drive. It has 5 of 6 subfeatures selected. The subfeatures require 9093KB.
Location:
C:\Program Files\TortoiseSVN\
Browse
Reset
Disk Usage
< Back
Next >
Cancel


TortoiseSVN 1.14.5.29465 (64 bit) Setup
TortoiseSVN
Completing the TortoiseSVN 1.14.5.29465 (64 bit) Setup Wizard
Click the Finish button to exit the Setup Wizard.
Show Changelog
Thanks for using TortoiseSVN. You can show your appreciation and support future development by donating!
Donate!
< Back
Finish
Cancel

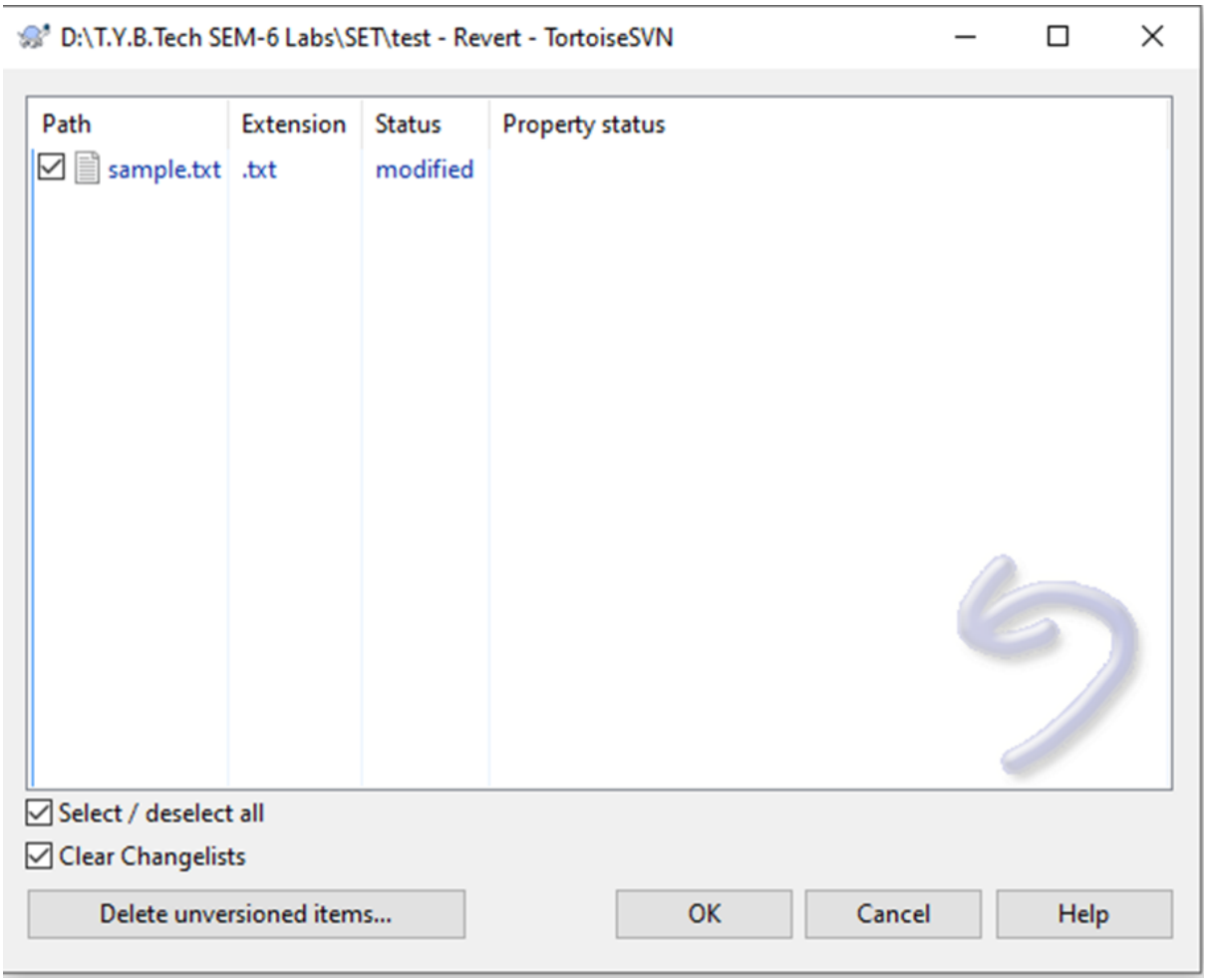

Checkout
Repository
URL of repository:
file:///D:/TY CSE SEM-II/SET Lab/Assignment 6
Checkout directory:
D:\TY CSE SEM-II\SET Lab\Assignment 6
Multiple, independent working copies
Checkout Depth
Fully recursive
Omit externals
Choose items...
Revision
HEAD revision
Revision
Show log
OK
Cancel
Help

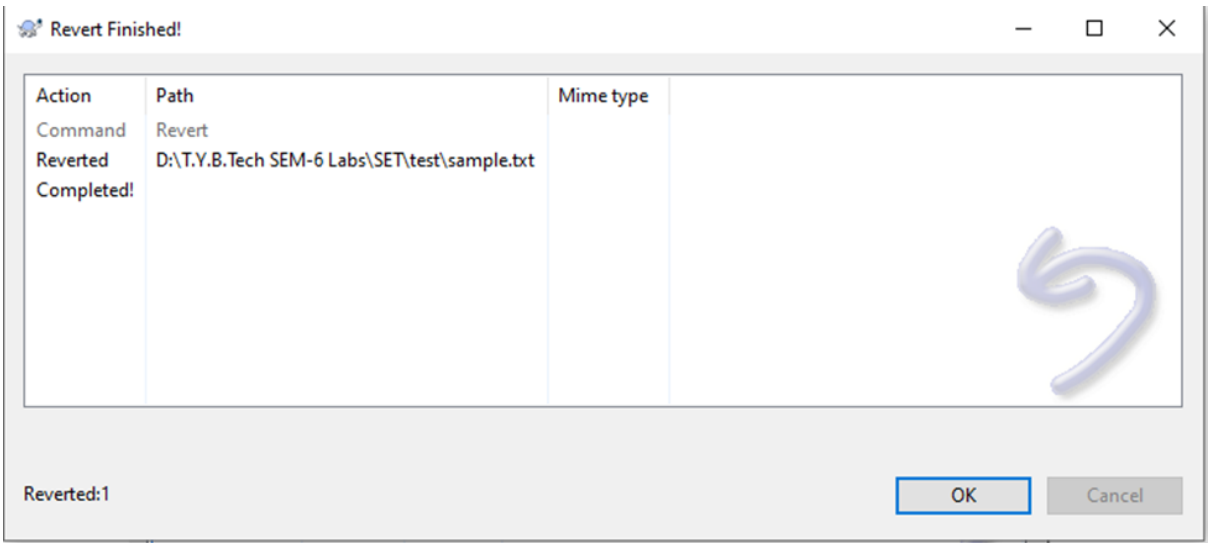
Checkout:


Checkout
Repository
URL of repository:
file:///D:/TY CSE SEM-II/SET Lab/Assignment 6
...
Checkout directory:
D:\TY CSE SEM-II\SET Lab\Assignment 6
...
Multiple, independent working copies
Checkout Depth
Fully recursive
Omit externals
Choose items...
Revision
HEAD revision
Revision
Show log
OK
Cancel
Help

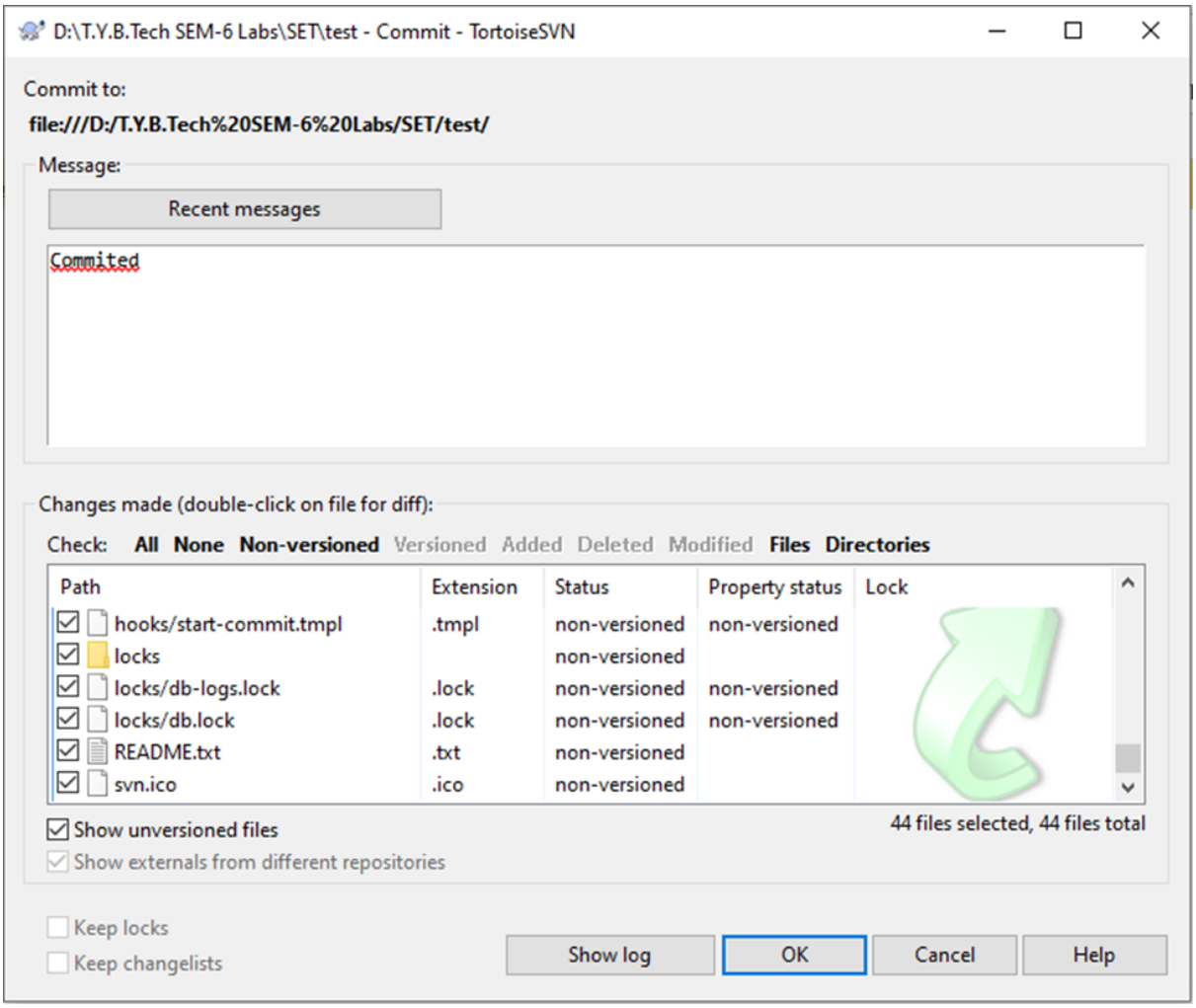

Checkout Finished!
Action
Path
Command
Checkout from file:///D:/TY CSE SEM-II/SET Lab/Assignment 6/test, revision HEAD, Fully recursive, Externals inclu
Updating
D:\TY CSE SEM-II\SET Lab\Assignment 6\test from file:///D:/TY%20CSE%20SEM-II/SET%20Lab/Assignment%206,
Completed
At revision: 0
OK
Cancel

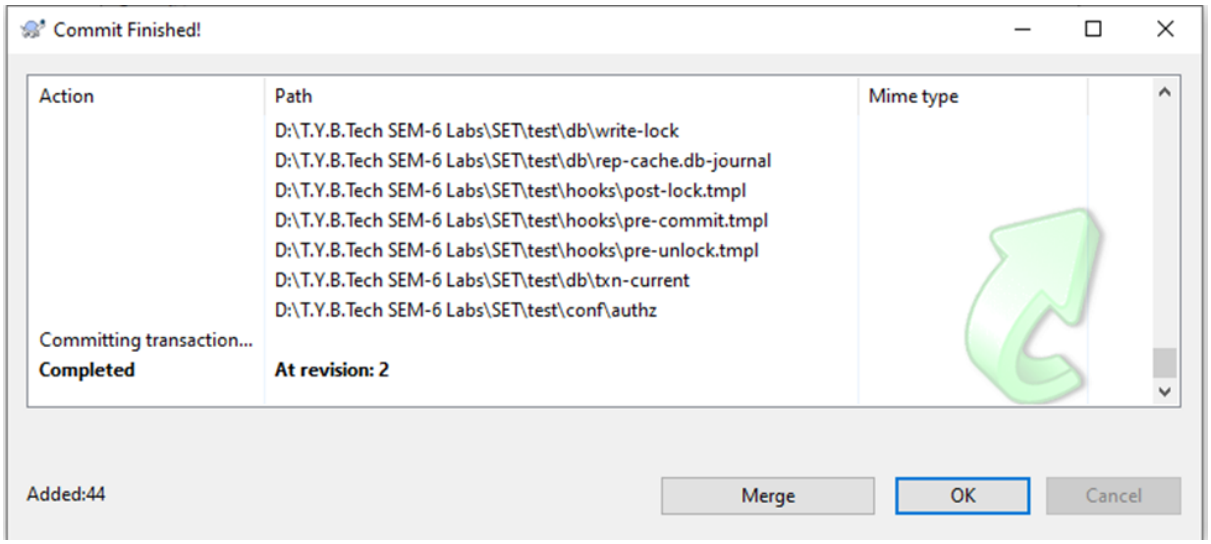
Revert:


D:\T.Y.B.Tech SEM-6 Labs\SET\test - Revert - TortoiseSVN
Path
Extension
Status
Property status
sample.txt
.txt
modified
Select / deselect all
Clear Changelists
Delete unversioned items...
OK
Cancel
Help

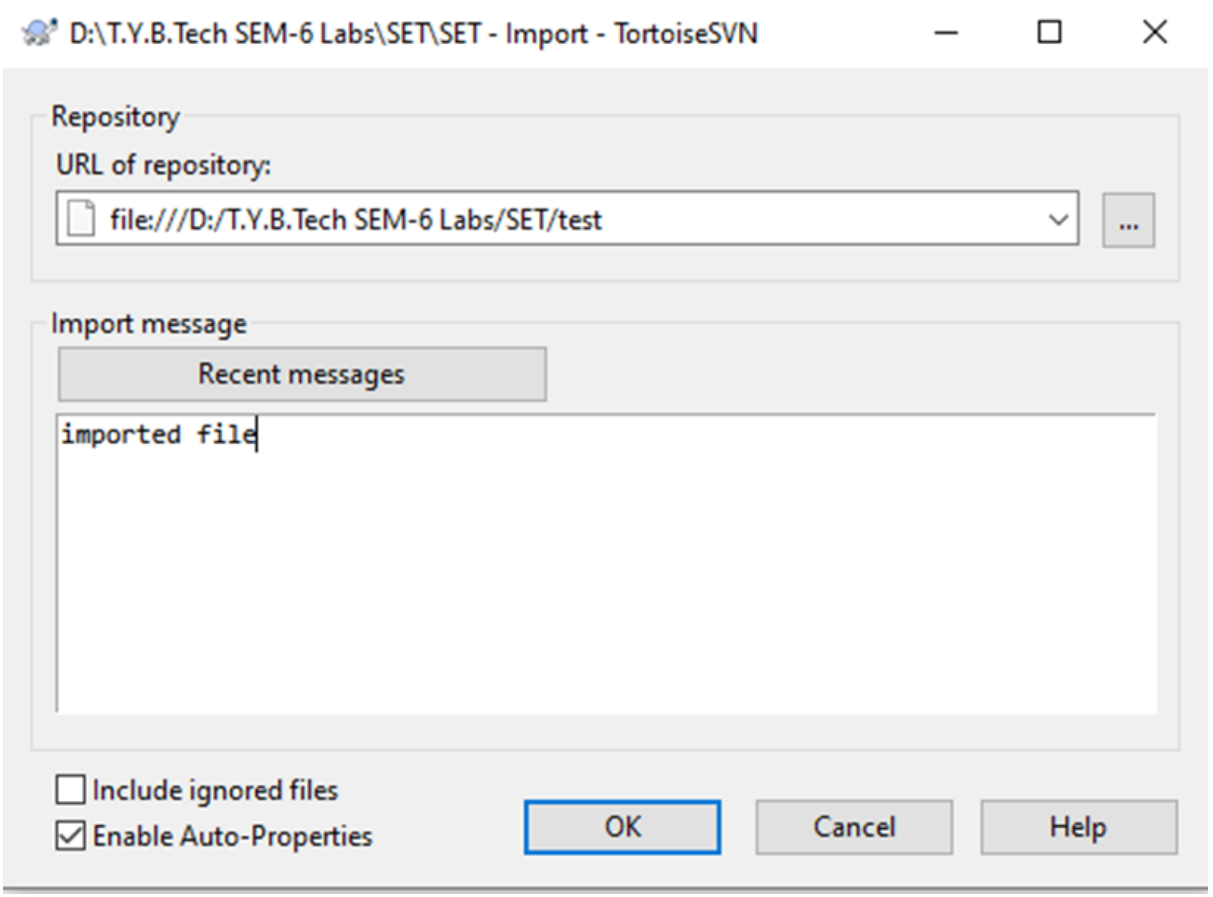

Revert Finished!
Action
Path
Mime type
Command
Revert
Reverted
D:\T.Y.B.Tech SEM-6 Labs\SET\test\sample.txt
Completed!
Reverted:1
OK
Cancel

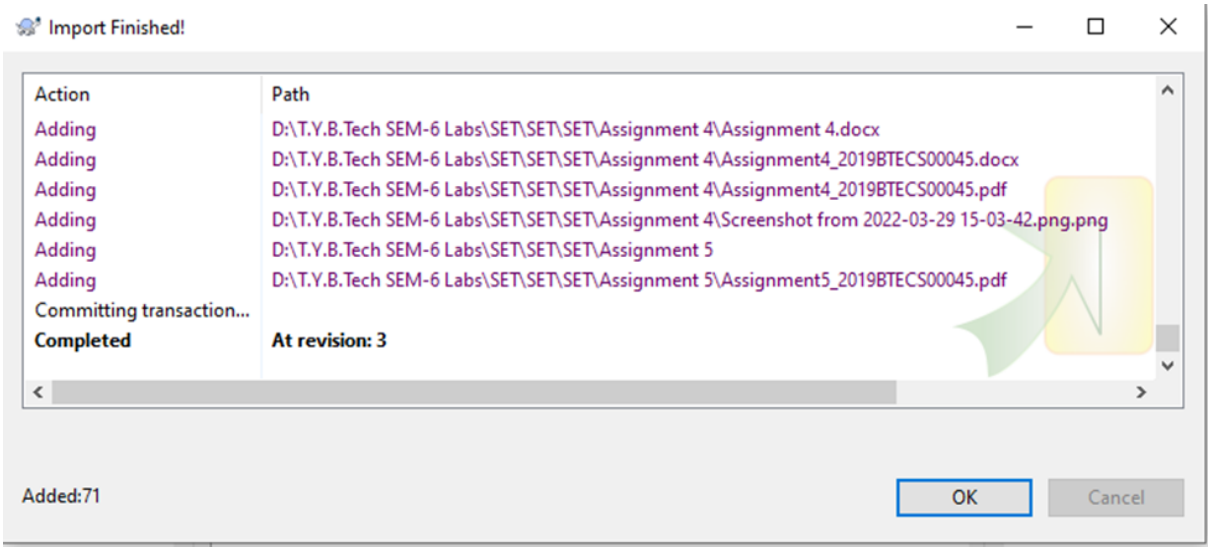
Commit:


D:\T.Y.B.Tech SEM-6 Labs\SET\test - Commit - TortoiseSVN
Commit to:
file:///D:/T.Y.B.Tech%20SEM-6%20Labs/SET/test/
Message:
Recent messages
Commited
Changes made (double-click on file for diff):
Check: All None Non-versioned Versioned Added Deleted Modified Files Directories
Path
Extension
Status
Property status
Lock
hooks/start-commit.tmpl .tmpl non-versioned non-versioned
locks non-versioned
locks/db-logs.lock .lock non-versioned non-versioned
locks/db.lock .lock non-versioned non-versioned
README.txt .txt non-versioned
svn.ico .ico non-versioned
Show unversioned files
44 files selected, 44 files total
Show externals from different repositories
Keep locks
Keep changelists
Show log
OK
Cancel
Help

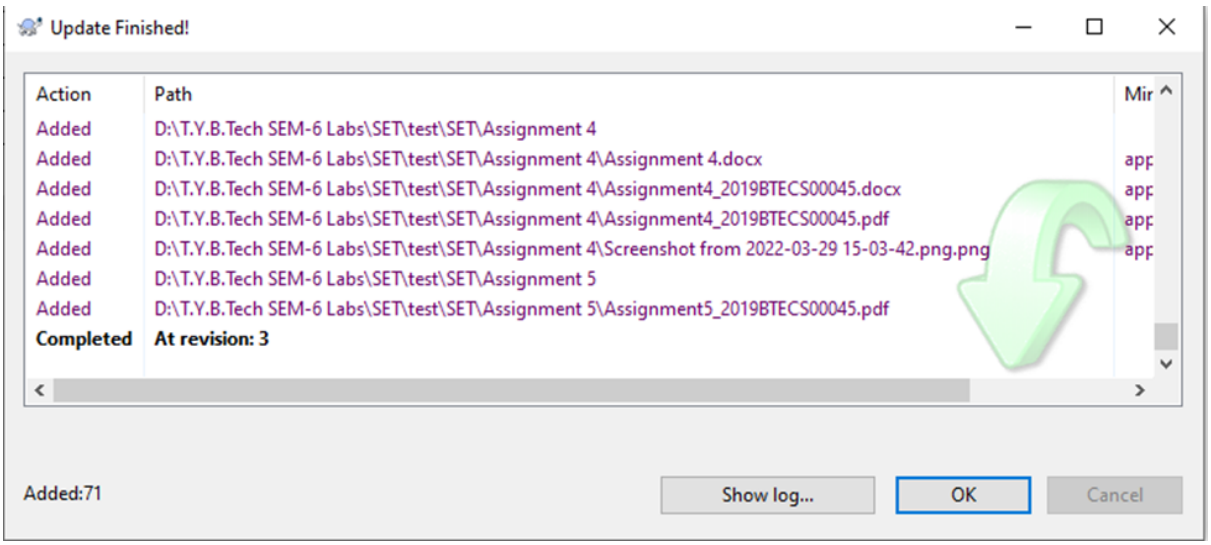

Commit Finished!
Action
Path
Mime type
D:\T.Y.B.Tech SEM-6 Labs\SET\test\db\write-lock
D:\T.Y.B.Tech SEM-6 Labs\SET\test\db\rep-cache.db-journal
D:\T.Y.B.Tech SEM-6 Labs\SET\test\hooks\post-lock.tmpl
D:\T.Y.B.Tech SEM-6 Labs\SET\test\hooks\pre-commit.tmpl
D:\T.Y.B.Tech SEM-6 Labs\SET\test\hooks\pre-unlock.tmpl
D:\T.Y.B.Tech SEM-6 Labs\SET\test\db\txn-current
D:\T.Y.B.Tech SEM-6 Labs\SET\test\conf\authz
Committing transaction...
Completed
At revision: 2
Added:44
Merge
OK
Cancel

Import:

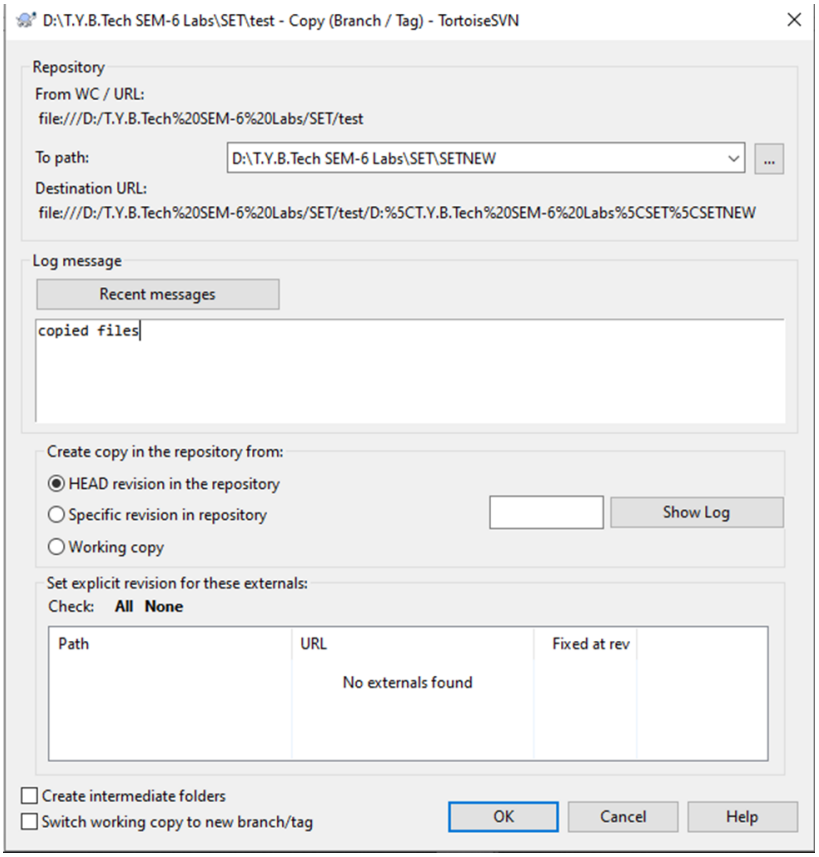

D:\T.Y.B.Tech SEM-6 Labs\SET\SET - Import - TortoiseSVN
Repository
URL of repository:
file:///D:/T.Y.B.Tech SEM-6 Labs/SET/test
...
Import message
Recent messages
imported file
Include ignored files
Enable Auto-Properties
OK
Cancel
Help

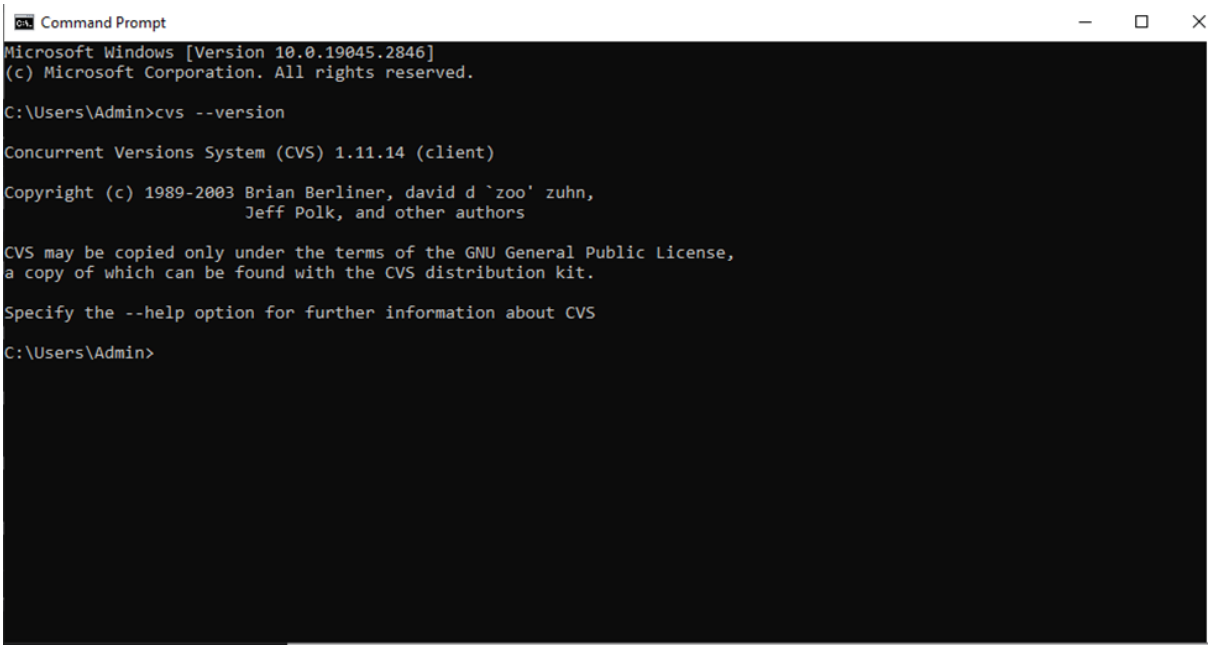

Import Finished!
Action
Path
Adding
D:\T.Y.B.Tech SEM-6 Labs\SET\SET\SET\Assignment 4\Assignment 4.docx
Adding
D:\T.Y.B.Tech SEM-6 Labs\SET\SET\SET\Assignment 4\Assignment4_2019BTECS00045.docx
Adding
D:\T.Y.B.Tech SEM-6 Labs\SET\SET\SET\Assignment 4\Assignment4_2019BTECS00045.pdf
Adding
D:\T.Y.B.Tech SEM-6 Labs\SET\SET\SET\Assignment 4\Screenshot from 2022-03-29 15-03-42.png.png
Adding
D:\T.Y.B.Tech SEM-6 Labs\SET\SET\SET\Assignment 5
Adding
D:\T.Y.B.Tech SEM-6 Labs\SET\SET\SET\Assignment 5\Assignment5_2019BTECS00045.pdf
Committing transaction...
Completed
At revision: 3
Added:71
OK
Cancel

Update:


Update Finished!
Action
Path
Added
D:\T.Y.B.Tech SEM-6 Labs\SET\test\SET\Assignment 4
Added
D:\T.Y.B.Tech SEM-6 Labs\SET\test\SET\Assignment 4\Assignment 4.docx
Added
D:\T.Y.B.Tech SEM-6 Labs\SET\test\SET\Assignment 4\Assignment4_2019BTECS00045.docx
Added
D:\T.Y.B.Tech SEM-6 Labs\SET\test\SET\Assignment 4\Assignment4_2019BTECS00045.pdf
Added
D:\T.Y.B.Tech SEM-6 Labs\SET\test\SET\Assignment 4\Screenshot from 2022-03-29 15-03-42.png.png
Added
D:\T.Y.B.Tech SEM-6 Labs\SET\test\SET\Assignment 5
Added
D:\T.Y.B.Tech SEM-6 Labs\SET\test\SET\Assignment 5\Assignment5_2019BTECS00045.pdf
Completed
At revision: 3
Added:71
Show log...
OK
Cancel

Copy:


D:\T.Y.B.Tech SEM-6 Labs\SET\test - Copy (Branch / Tag) - TortoiseSVN
Repository
From WC / URL:
file:///D:/T.Y.B.Tech%20SEM-6%20Labs/SET/test
To path:
D:\T.Y.B.Tech SEM-6 Labs\SET\SETNEW
Destination URL:
file:///D:/T.Y.B.Tech%20SEM-6%20Labs/SET/test/D:%5CT.Y.B.Tech%20SEM-6%20Labs%5CSET%5CSETNEW
Log message
Recent messages
copied files
Create copy in the repository from:
HEAD revision in the repository
Specific revision in repository
Working copy
Show Log
Set explicit revision for these externals:
Check: All None
Path
URL
Fixed at rev
No externals found
Create intermediate folders
Switch working copy to new branch/tag
OK
Cancel
Help


Command Prompt
Microsoft Windows [Version 10.0.19045.2846]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Admin>cvs --version
Concurrent Versions System (CVS) 1.11.14 (client)
Copyright (c) 1989-2003 Brian Berliner, david d `zoo' zuhn,
Jeff Polk, and other authors
CVS may be copied only under the terms of the GNU General Public License,
a copy of which can be found with the CVS distribution kit.
Specify the --help option for further information about CVS
C:\Users\Admin>