Advanced Scripting   
SQL Server Data

Last Updated: 5/30/2023 9:30 PM Version 1  
Document Prepared for: CIT361 Student

# Name Daniel Harris ID 235868292

# Instructions

Save a copy of this document. Answer all questions directly in this document. You will save and upload this completed document as your homework submission.

# Overview

Connecting to SQL Server from PowerShell is very easy. Since most of you probably don’t have a MS SQL Server installed, I have setup a lab where you can access one. You will need an SSH client to connect to the lab.

# Requirements

* SSH Client
* Internet Access

# Setup

Your instructor will create an account for you on the lab computer. The your **username** is the **mailbox** part of your BYUI email. This will be the email on the class roster, it is usually the first 3 letters of your last name, then 5 numbers, your **password** is your **iNumber**, you are welcome to change your password.

# Task 1—Connect to the lab

## Steps

1. The SSH server does not use the standard SSH port rather it uses port 443.
2. Connect to the server with your preferred SSH client using the following information
   1. Host: **cit361-lab.citwdd.net**   
      Username: your byui mailboxname e.g. if your email is [bar12345@byui.edu](mailto:bar12345@byui.edu) your username is bar12345  
      Password: Your iNumber
   2. If you are using ssh the command would look like  
      ssh [bar12345@cit361-lab.cit.byui.edu](mailto:bar12345@cit361-lab.cit.byui.edu) -p 443
3. After you connect Start PowerShell:

powershell

# Task 2—Query the SQLServer

To run a query against sql server you need to know 3 pieces of information

1. SQL Server Instance: ms-sql.cit361.com
2. Username: ps
3. Password: PowerShellRocks!

## Steps

1. Execute a query  
   $server='ms-sql.cit361.com'  
   $user='ps'  
   $Password='PowerShellRocks!'  
   $sql="Select \* from metal"  
   Invoke-Sqlcmd -ServerInstance $server -Username $user -Password $password -Query $sql
2. That’s all there is to it!
3. You can get a list of the tables in the data base with the query. “Select name from sys.tables”
   1. What tables are in the database? Alloy, alloymetal,gem,metal

# Task 3—Practice

## Steps

1. Since you are all very precious to me add a record to the gem table, use your username for the mineral, make up the rest of the data, the GID will be automatically assigned.
2. Write a query to retrieve your mineral.
   1. What GID was assigned? 205
3. What is the melting point of the alloy coin silver? 1634

# Wrap-up

Close your SSH session.

# Deliverable

Upload this document with completed answers to i-learn.