Assignment 1

(Due 15.04.2014)

1. **Linux basics**
   1. What command should be used to change to the /usr/bin directory?
      1. mv /usr/bin
      2. ls /usr/bin
      3. cp /usr/bin
      4. **cd /usr/bin**
   2. What command should be used to list the contents of the /home directory?
      1. **ls /home**
      2. cp /home
      3. mv /home
      4. cd /home
   3. What command should be used to copy recursively the contents of the /home/source directory to the /home/test directory?
      1. cp /home/source /home/test
      2. nano /home/source /home/test
      3. ls /home/source /home/test
      4. **cp -R /home/source /home/test**
   4. What command should be used to move the /home/app directory to the /var directory?
      1. rm /home/app /var
      2. **mv /home/app /var**
      3. cp /home/app /var
      4. pwd /home/app /var
   5. What command should be used to remove the /home/file.txt file?
      1. mv /home/file.txt
      2. **rm /home/file.txt**
      3. cp /home/file.txt
      4. rsync /home/file.txt
   6. What command can be used to open the /home/file.txt for editing?
      1. rm /home/file.txt
      2. git /home/file.txt
      3. **nano /home/file.txt**
      4. touch /home/file.txt
   7. On a default Ubuntu installation what command should be used for installing git?
      1. npm install git
      2. **apt-get install git**
      3. gem install git
      4. yum install git
   8. What command can be used to display the current directory?
      1. mv
      2. cp
      3. ls
      4. **pwd**
   9. What is the most commonly used directory for the users file in Linux?
      1. **/home/user**
      2. /var/user
      3. /tmp/user
      4. /usr/user
   10. In which directory are most commonly located Linux program executables?
       1. /var/log
       2. **/usr/bin**
       3. /home/user
       4. /etc/
   11. Which directory is most commonly used for storing configuration settings in Linux?
       1. /var/lib
       2. /usr/lib
       3. **/etc**
       4. /usr/bin
   12. What is the most common scenario when compiling programs from source?
       1. **./configure; make; make install**
       2. make; ./configure; make insall
       3. make install; make; ./configure
       4. make install; ./configure; make
2. **Git basics**
   1. What git command is used to clone a git repository?
      1. git pull
      2. git fetch
      3. **git clone**
      4. git init
   2. What command should be used to setup a local git repository?
      1. git new
      2. git install
      3. **git init**
      4. git branch
   3. What command should be used to add files to be commited in the next git commit?
      1. git add
      2. git fetch
      3. **git store**
      4. git pull
   4. What command should be used to commit changes to a local git repository?
      1. git set
      2. git push
      3. git add
      4. **git commit**
   5. What command should be used to push changes to a remote git branch?
      1. git fetch
      2. **git push**
      3. git install
      4. git init
3. **Ruby basics**
   1. What is the name of the ruby package manager?
      1. **gem**
      2. npm
      3. pip
      4. pear
   2. What is the command that should be used to install a ruby package?
      1. bundle install
      2. bundle install package
      3. gem fetch package
      4. **gem install package**
   3. What is the command to update a ruby package?
      1. bundle update package
      2. **gem update package**
      3. gem update -g package
      4. bundle install package
   4. What is the most common way for managing project package dependencies?
      1. Describe all the packages in a text file and insall the manually
      2. **Create an automated script which runs all the necessary commands to install the packages**
      3. Put all the dependencies in a Gemfile and use bundler
      4. Put all the dependencies in the Documentation of the project
4. **SQL Basics**
   1. Write a SQL statement for creating a users table with an id, username, password, created\_at columns:

CREATE TABLE users

(

UserID int,

Username varchar(10),

Password varchar(15),

Created\_at varchar(10)

)

* 1. Write a SQL statement for updating the password column in the users table for a user with an id of 1:

UPDATE Users

SET Password

WHERE UserID=1

* 1. Write a SQL statement for inserting a new user in the users table with the following data: username: Test; password: 123456; id: 5, created\_at: 2013-10-10 23:59:50:

INSERT INTO Users VALUES(UserID, Username, Password, Created\_at)

VALUES (‘5’, ‘Test’, ‘123456’, ‘2013-10-10 23:59:50’)

* 1. Write a SQL statement for selecting the username field in the users table for user with the id of 5:

SELECT Username FROM Users WHERE UserID=5

SELECT \* FROM Users

* 1. Write a SQL statement for deleting a user in the users table with an id of 5:

DELETE FROM Users WHERE UserID=’5’

SELECT \* FROM Users;