Consider at work you realised that it is taking too long to **build a webserver** and you decided to automate the process. ( please go ahead and write a bash script that will make the process a little easier than manual efforts.)

#!/bin/bash

function update(){

echo "Updating the system, please wait"

sleep 5

yum update -y

}

function apache(){

echo "Installing apache packages, please wait"

sleep 5

yum install httpd -y

# add iptables rule for port 80 TCP

# sed -i $'/Line to insert after/a\ i Line one to insert [\\n](file:///\\n) second new line to insert [\\n](file:///\\n) third new line to insert' file

sed -i '/22/a\-A INPUT -m state --state NEW -M tcp -p tcp --dport 80 -j ACCEPT' /etc/sysconfig/iptables

# start the apache daemon

service httpd start

# make the apache deamon permanent

chkconfig httpd on

# start the firewall

service iptables restart

# Check if the new port 80 is opened

sleep 5

echo "checking all the open ports on this server"

iptables -nL

sleep 10

}

function mysql(){

echo "installing MySQL packages, please wait"

sleep 5

yum install mysql-server -y

#start mysql services

service mysqld start

#make it permanent

chkconfig mysqld on

function sed\_root\_password

echo

echo "To set MySQL root password, please follow the steps and use '12345' as def

ault root password.........."

sleep 10

mysql\_secure\_installation

}

function mysql\_conf(){

mysql -uroot -p'12345' mysql<<EOFMYSQL

create database webserver;

create user oracle@localhost identified by 'school1';

grant all privileges on webserver.\*to oracle@localhost identified by 'school1';

flush privileges;

exit

EOFMYSQL

}

function php(){

echo "Installing PHP packages, please wait"

sleep5

yum install php php-mysql -y

# This will insert the code to test the PHP web

echo "<?php phpinfo();?>" >> /var/www/html/info.php

#restart apache services

service httpd restart

# Install php-gd

yum install php-gd -y

#wordpress installation

echo "Downloading the worpress package, please wait"

sleep5

cd /tmp

mkdir file

cd file

wget https://wordpress.org/wordpress-5.1.1.tar.gz

echo "extracting the wordpress package, please wait"

tar -xvzf wordpress-5.1.1.tar.gz

cd

#copy wordpress folder content to /var/www/html folder.

cp -r/temp/file/wordpress/\* /var/www/html/

# Make a directory call uploads in wp-content

mkdir /var/www/html/wp-content/uploads

# Change the owner af all file under /var/www/html/ to apache, because the webserver will be running by apache and not root

chown -R apache:apache /var/www/html/\*

cd /var/www/html

cp wp-config-sample.php wp-config.php

chown -R apache:apache /var/www/html/\*

# To setup the mysql connection with the webserver database and the user oracle

# Look for any line that has the word “database\_name\_here” and replace it by “webserver”

sed -i "s/database\_name\_here/webserver" /var/www/html/wp-config.php

sed -i "s/username\_here/oracle" /var/www/html/wp-config.php

sed -i "s/password\_here/school1/" /var/www/html/wp-config.php

service httpd restart

# Install php-gd

yum install php-gd -y

#wordpress installation

echo "Downloading the worpress package, please wait"

sleep 5

cd /tmp

mkdir file

cd file

wget https://wordpress.org/wordpress-5.1.1.tar.gz

echo "extracting the wordpress package, please wait"

tar -xvzf wordpress-5.1.1.tar.gz

cd

echo

#copy wordpress folder content to /var/www/html folder.

cp -r/temp/file/wordpress/\* /var/www/html/

# Make a directory call uploads in wp-content

mkdir /var/www/html/wp-content/uploads

# Change the owner af all file under /var/www/html/ to apache, because the webserver will be running by apache and not root

chown -R apache:apache /var/www/html/\*

cd /var/www/html

cp wp-config-sample.php wp-config.php

chown -R apache:apache /var/www/html/\*

# To setup the mysql connection with the webserver database and the user oracle

sed -i "s/database\_name\_here/webserver/" /var/www/html/wp-config.php

sed -i "s/username\_here/oracle/" /var/www/html/wp-config.php

sed -i "s/password\_here/school1/" /var/www/html/wp-config.php

service httpd restart

}

#update

apache

mysql

sed\_root\_password

mysql\_conf

php