1. Installation of server hardware and OS :
2. Install Virtual machine player on windows (VMware-player-7.0.0-2305329 ) .

Refer :https://kb.vmware.com/selfservice/microsites/search.do?language=en\_US&cmd=displayKC&externalId=2053973

1. Download image of ubuntu (ubuntu-14.04.2-desktop-i386.iso ) .

Refer : <http://old-releases.ubuntu.com/releases/14.04.2/>

1. After install and open VMware-player .
2. Create new virtual machine for linux on VMware-player using downloaded image (.iso)
3. Launch/use new VM Ubuntu machine
4. Performs script maintenance and updates due to changes in requirements or implementations
5. Checking disk space
6. Install System and Application Patches/Updates
   * 1. sudo apt-get update; sudo apt-get dist-upgrade
7. Clean Up Temporary Files
8. Uninstalling Programs

Refer : <http://lifehacker.com/5817282/what-kind-of-maintenance-do-i-need-to-do-on-my-linux-pc>

1. Sets up and maintains the test environments for both manual and automated testing
   * Setup new Virtual machine as done in Point 1.
   * Setup required dependent softwares needed in testing environment.
     + Different ways to install software :
       - * yum install [program]
         * apt-get install [program]
         * rpm -i [program].rpm
         * wget [program].tar.gz -> unpack -> ./configure -> make -> make install
     + Install Latest versions of :
       - JAVA (oracle) : <http://www.wikihow.com/Install-Oracle-Java-on-Ubuntu-Linux>
       - ANT
       - MAVEN
       - TOMCAT
       - GIT
       - Firefox , Chrome
   * Set Environmental and Shell Variables

Refer: <https://www.digitalocean.com/community/tutorials/how-to-read-and-set-environmental-and-shell-variables-on-a-linux-vps>

1. Validates deployments
   * Deploy sample web application (.war) on tomcat
     + <https://tomcat.apache.org/tomcat-6.0-doc/appdev/sample/>
     + <http://stackoverflow.com/questions/5109112/how-to-deploy-a-war-file-in-tomcat-7>
   * Open URL
   * Check whether application is working fine
   * Check process status ( using command : ps –ef | grep –i java )
2. May troubleshoot existing information systems to identify errors or deficiencies and develops solutions.
   * Verify application logs for errors/warnings
     + Catalina.out for tomcat
     + If application generates logs , go to the log directory of application and check log
       - Tail –f abc.log
       - Grep
       - Cat
       - More
       - vi
   * Check process status ( using command : ps –ef | grep –i java )
3. Creating and maintaining development platforms
   * Upgrade/degrade versions of exiting softwares
     + Java
     + ANT
     + MAVEN
     + TOMCAT
     + GIT
     + Firefox , Chrome
4. Using general commands
   * update bash profile
   * sudo to root
   * ps
   * grep
   * cd
   * ls
   * awk
   * sed
   * find
   * ssh
   * scp
   * top