Tomcat
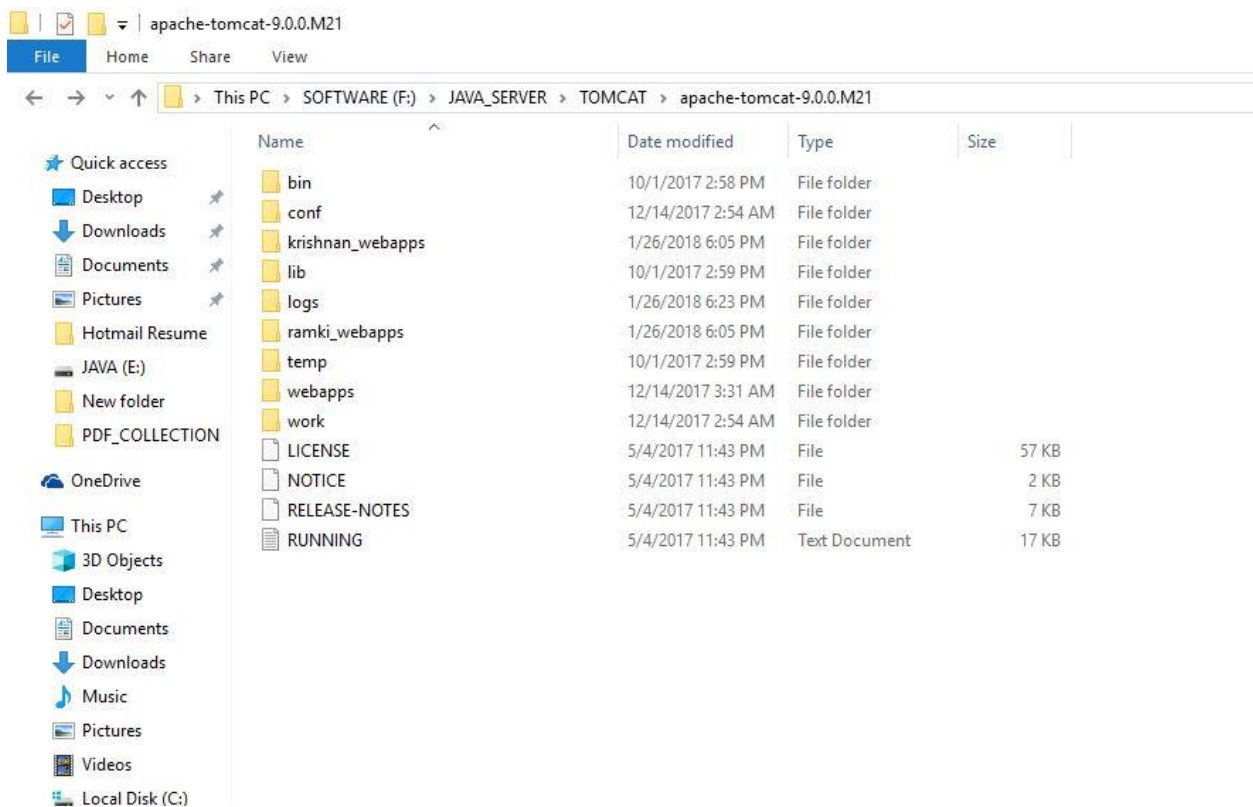
How to configure more then one host to the same tomcat server with same port

Step 1: download the tomcat server with the below link.

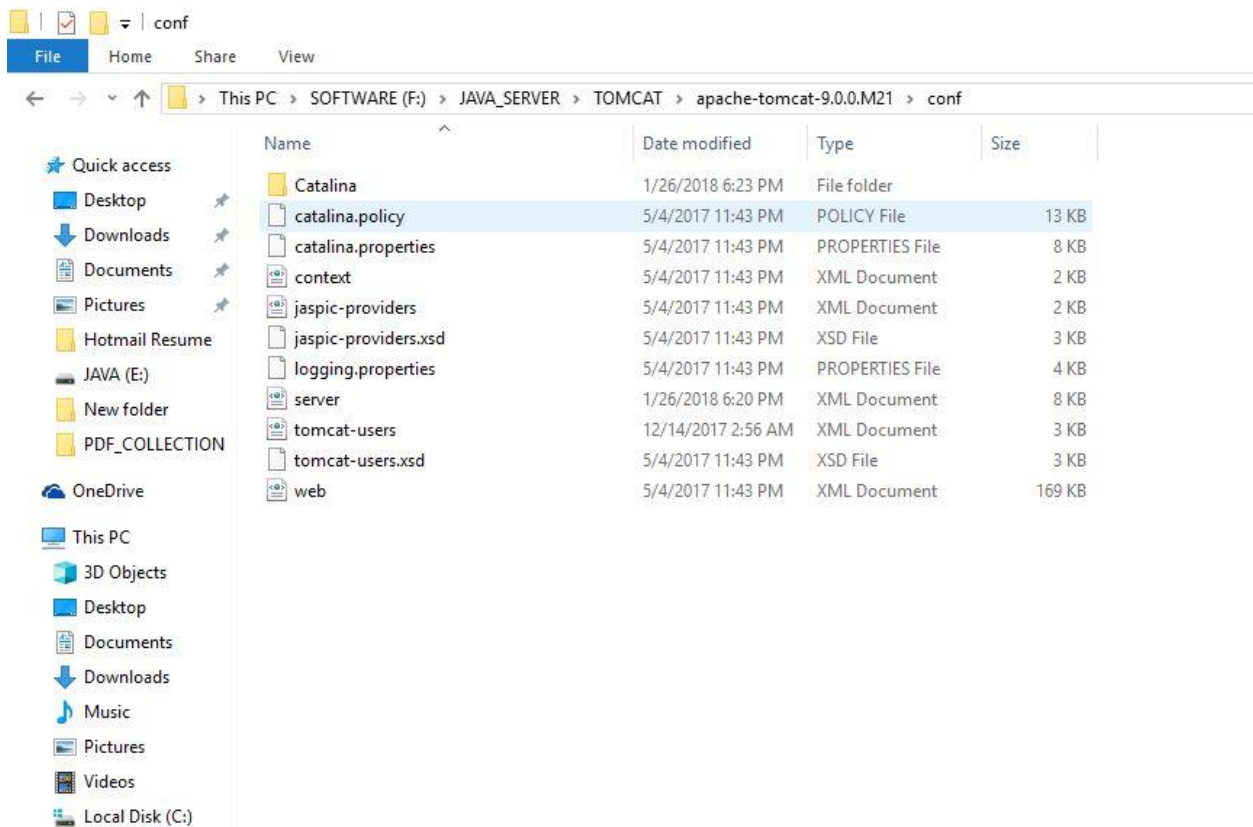https://tomcat.apache.org/download-80.cgi

Step2: extract tomcat zip file to a place and open that extracted tomcat folder

Step3: we will get file as below (according to tomcat 9, these files may be differ according to tomcat version)

Step4: open conf directory.

Step5: here we can see one file called server.xml this is the server configuration in the tomcat server. Every server related configuration can be complete with this file.

We will open this file to our text editor

```
<server>

        <service name="Catalina">

                <engine name="Catalina">

                        <host name="localhost">

                        </host>

                </engine>

        </service>

</server>
```

In that file we will see that we have one root tag called "<server>"

In <server> tag we will search tag <service> after coming up to tag <service> we will go to tag called <engine> and inside he tag <engine> will be have one tag <host>. After coming to host tag our searching process will be complete.

Now we have to just observer and modified the <host> tag

```
<Host name="localhost"  appBase="webapps" unpackWARs="true" autoDeploy="true">
        <Valve className="org.apache.catalina.valves.AccessLogValve" directory="logs"
        prefix="localhost_access_log" suffix=".txt"
        pattern="%h %l %u %t &quot;%r&quot; %s %b" />
</Host>
```

Above is the localhost host configuration

Here we need to focus on two main things

1: "name" attribure: -> the "name" attribute will define that what will be the name of our host name.

2: "appBase" attribure:-> the "appBase" attribute will define that folder name where our all app will be deployed. By default we have webapps directory in tomcat folder to upload all the war file, that's why in default configuration we will get that "webapps" directory in localhost configuration.

Step 6: now we will just copy and paste the above configuration without <value> tag

```
<Host name="www.myhost.com"  appBase="myAppDirecotry" unpackWARs="true"
        autoDeploy="true">
</Host>
```

Note: here we can see that we have define our custom host name and directory where we will upload our war file for the respective domain name (host name).

Note: this configuration is enough for server side, now we have to do one more modification which is in host file or window

For that we need to open window explorer and we have to goo the below location.

Path: C:\Windows\System32\drivers\etc
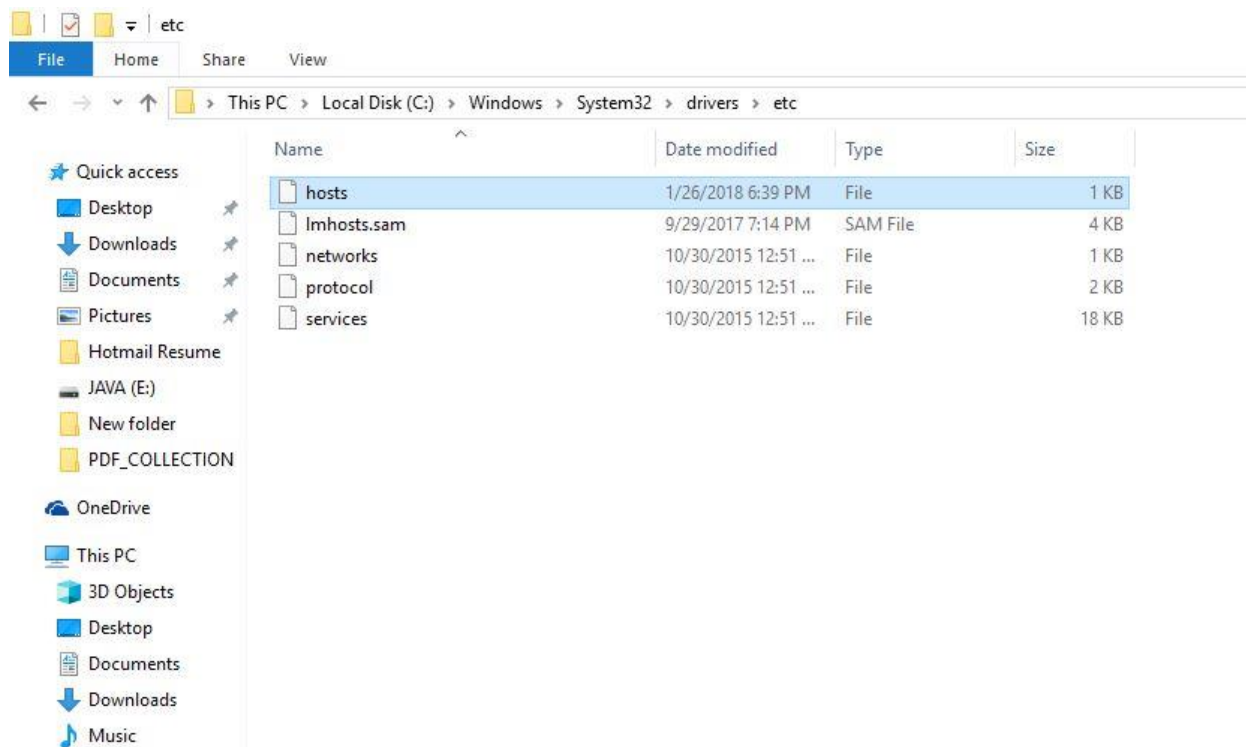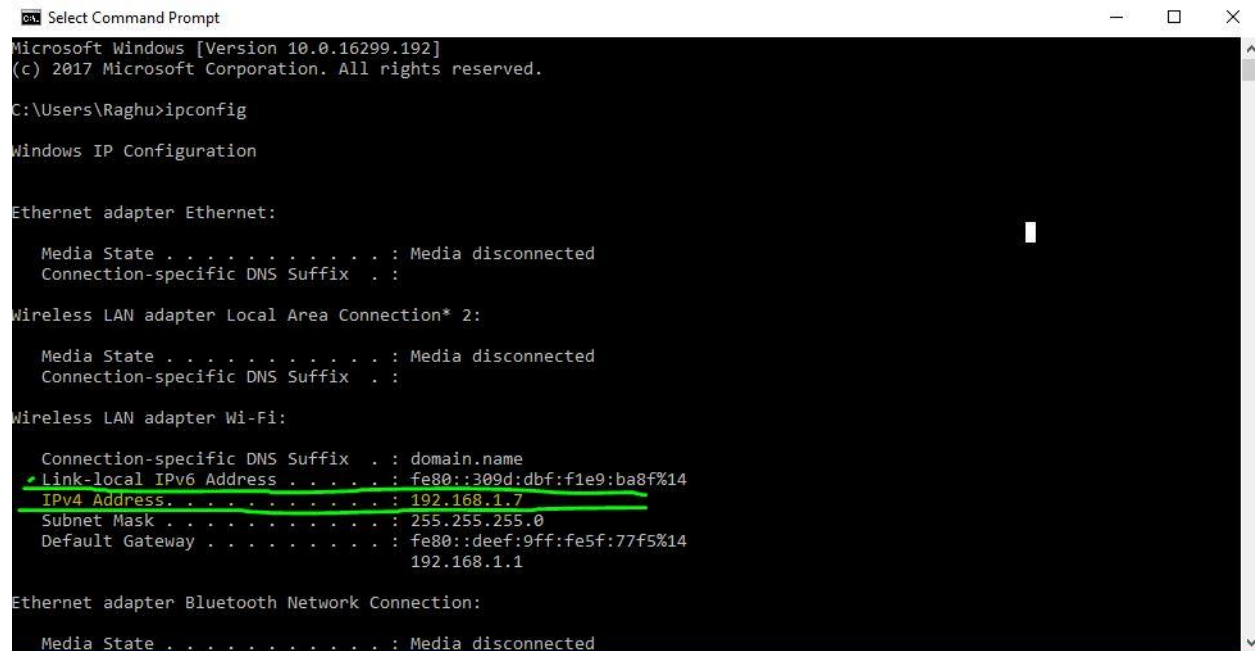
Here we can see the first file is hosts

We have to open this file to text editor and we will see,


```
# Copyright (c) 1993-2009 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#      102.54.94.97      rhino.acme.com          # source server
#       38.25.63.10      x.acme.com              # x client host

# localhost name resolution is handled within DNS itself.
#    127.0.0.1       localhost
#    ::1             localhost
```

In this file we can see that we have a default configuration with the localhost, same type of configuration we have to do for the our required domain name (host name). but instead of default IP `127.0.0.1` we have to set the IP on which tomcat is currently running.

For that open cmd

And type ipconfig
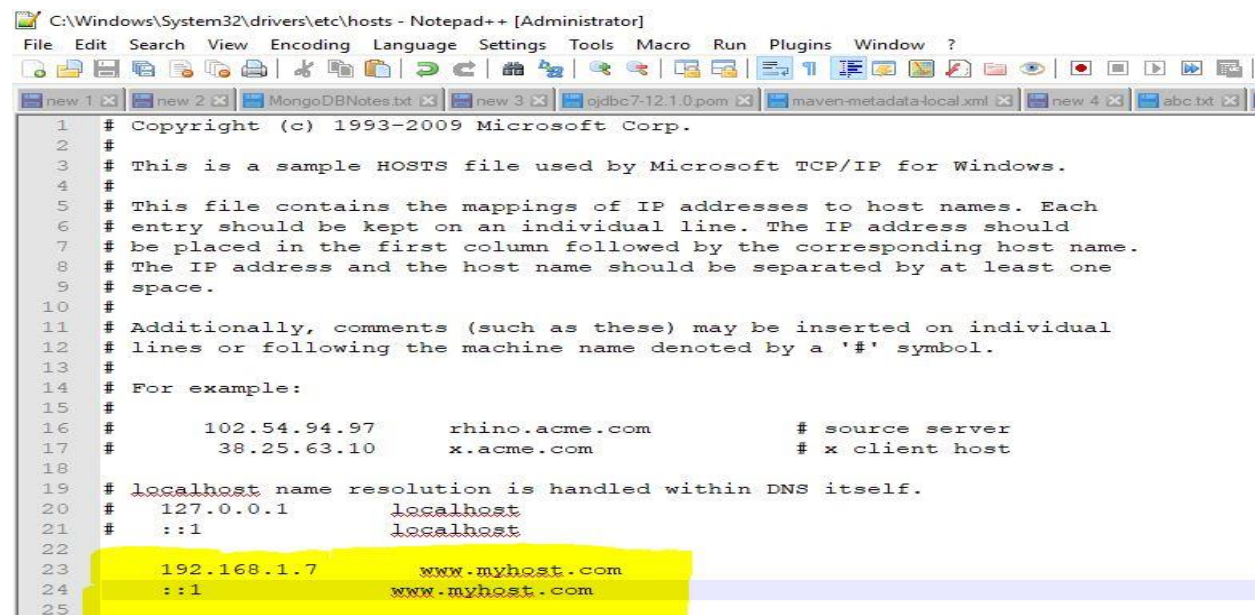
With this IP address we have to add one configuration is "hosts" file with our domain name like.

Step 7: after this step close all file and restart the tomcat server then we will be able to run our web app with our domain name.

Step 8: after restating tomcat server we can test out application like

www.myhost.com:8080/index.html

Note: With the custom domain if we also don't want to use default tomcat port number 8080 then also we have to do some modification in server.xml file in tomcat_home/conf directory.
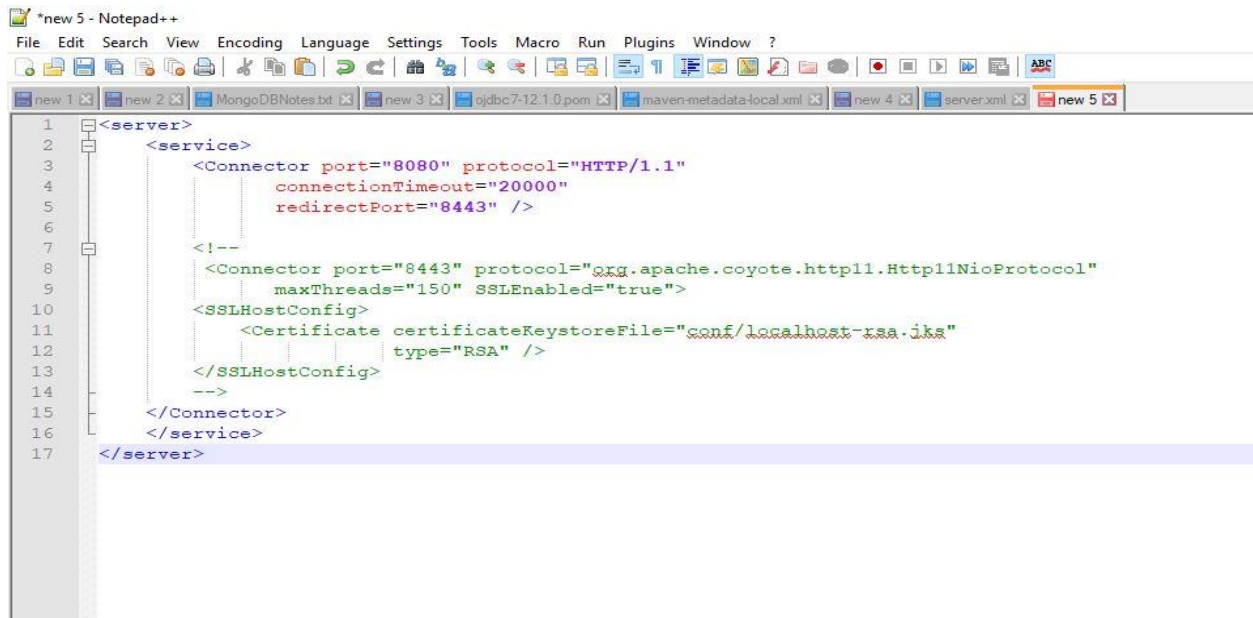
Step 1: open server.xml file from the given directory
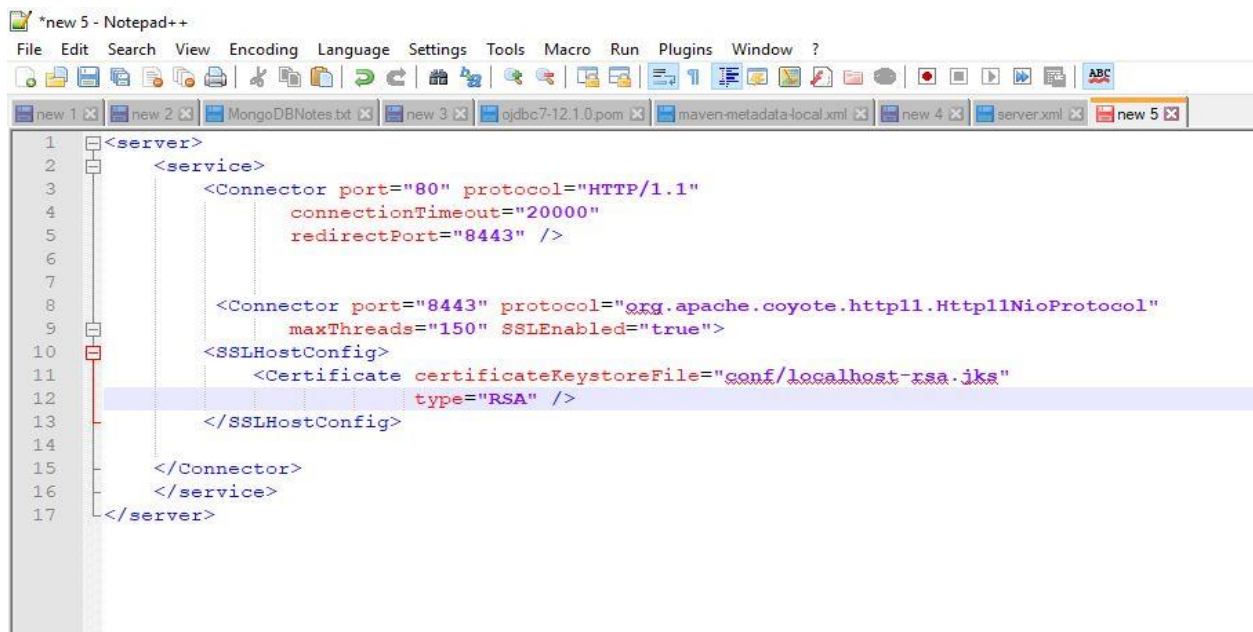
tomcat_home/conf
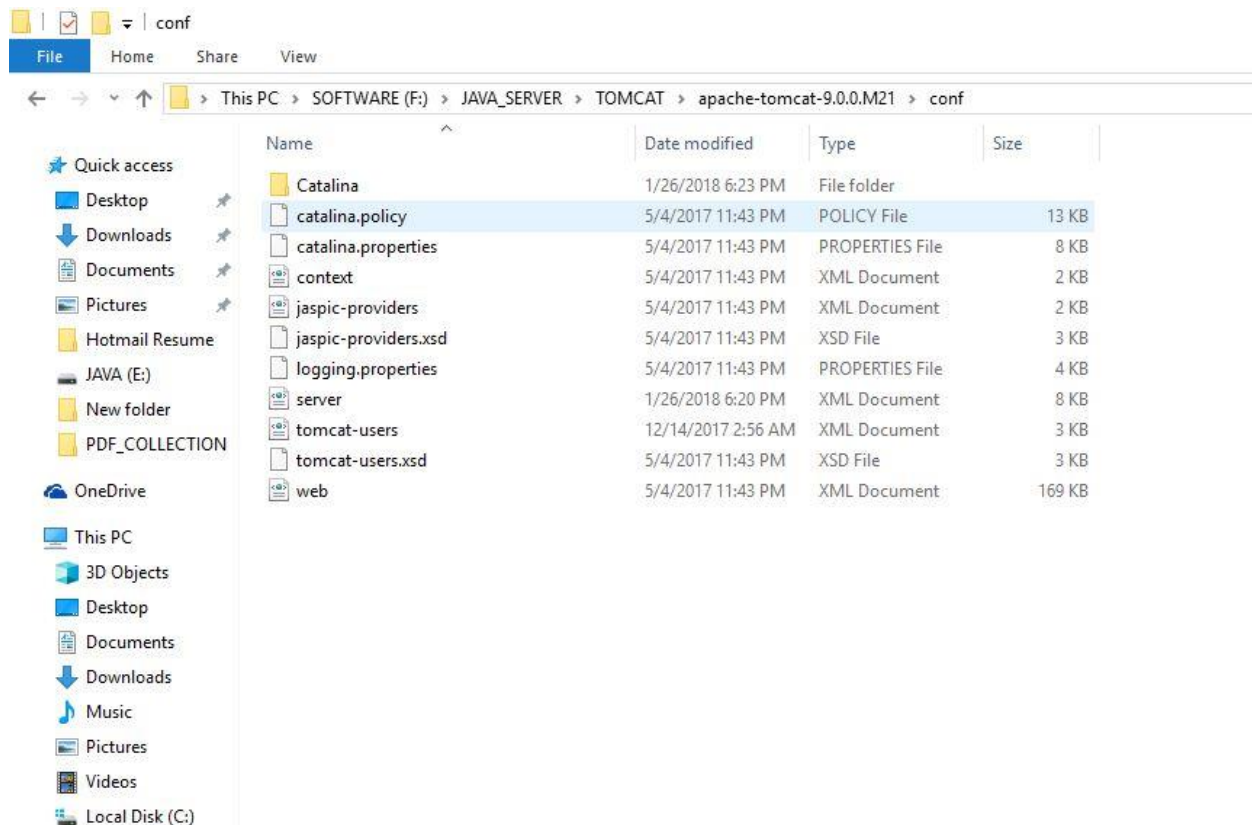
Open server file in text editor

```xml
<server>
    <service>
        <Connector port="8080" protocol="HTTP/1.1"
                connectionTimeout="20000"
                redirectPort="8443" />

        <!--
        <Connector port="8443" protocol="org.apache.coyote.http11.Http11NioProtocol"
                maxThreads="150" SSLEnabled="true">
        <SSLHostConfig>
            <Certificate certificateKeystoreFile="conf/localhost-rsa.jks"
                        type="RSA" />
        </SSLHostConfig>
        -->
        </Connector>
    </service>
</server>
```

Here we will see this configuration with some other configuration, But we need not to worry about other information.

Our requirement will be complete only by this modification.

We have to modify in two place.

1. In uncommented configuration we have to change the port number 80 instead of 8080.
2. And the second modification is we have to uncomment the below commented part.


```xml
<server>
    <service>
        <Connector port="80" protocol="HTTP/1.1"
                connectionTimeout="20000"
                redirectPort="8443" />


        <Connector port="8443" protocol="org.apache.coyote.http11.Http11NioProtocol"
                maxThreads="150" SSLEnabled="true">
        <SSLHostConfig>
            <Certificate certificateKeystoreFile="conf/localhost-rsa.jks"
                        type="RSA" />
        </SSLHostConfig>

        </Connector>
    </service>
</server>
```

That's all

After this all configuration we will be able to get our domain (host name) without any port number

Like:

www.myhost.com/index.html

Thanks

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