1. What is the role of IIS and how IIS Server works? Please describe properly about working with proper steps and explain Architecture.

Ans:IIS stands for Internet Information Services. Formerly known as Internet Information Server,IIS is a web server that runs on the Microsoft .NET platform on the Windows OS. IIS is normally installed on a Window Server.

For users to access a website, it is required that the website is hosted on some sort of web server.

IIS is a Web Server or a Windows component that accepts requests from Client browsers and responds with the requested page(s). It is an extensible web server that supports HTTP, HTTPS, FTP, FTPS, SMTP, & NNTP protocols.

Steps of working process:

The first part is the request sent by the user.

Once the request comes to the IIS server, it is processed. The IIS Server will perform all the required operations as per request.

Finally, the IIS Server sends the output back to the user. The output will generally be HTML content sent back to the user. This HTML content will be displayed in the web browser.

Architecture of IIS:
- When a client browser initiates an HTTP request for a resource on the Web server, HTTP.sys intercepts the request.
- HTTP.sys contacts WAS to obtain information from the configuration store.
- WAS requests configuration information from the configuration store, applicationHost.config.
- The WWW Service receives configuration information, such as application pool and site configuration.
- The WWW Service uses the configuration information to configure HTTP.sys.
- WAS starts a worker process for the application pool to which the request was made.
- The worker process processes the request and returns a response to HTTP.sys.
- The client receives a response.

2. What is an Application pool in IIS and how to create and assign Application pool to a website. Please explain in detail with an example.

Ans: Application pool: Application pools are used to separate set of IIS worker processes that share the same configuration. Application pools enable us to isolate our web application for better security, reliability, and availability.

There are two predefined Application Pools is IIS:

DefaultAppPool (Integrated)

ClassicAppPool

How to create a application pool:

Step 1: Right Click on Application Pool and give the name of your pool. Here, I have given "pool" and select Framework and click on OK:

Step 2: If you are writing something on the server [may be writing Error Events Logs], you need to change the Pool Identity to Local System. Right click on Pool Identity setting as shown in the following image:

Assign application pool to the application:
Step 1: Right Click on "TestWeb" Application and Select "Advanced Settings":

Step 2: Finally assign your created Application Pool "pool" to "TestWeb" Application.

Now you can run your application by just typing http:\\localhost\punitaweb and it can be accessible on the network by IP also.

3. What are the different ways of deploying Asp .net application on IIS. Describe briefly.
Ans: There are two approaches to Deploy website on IIS.
Approach 1: Web Deployment Package from visual studio.

In visual studio you can create a web Deployment Package which you can import from IIS to deploy you web application. Follow these steps to accomplish this:

1, Right click you asp.net web application project and select "package/Publish Setting".

2, Provide a few basic data in the configuration from (you may not want to change any setting in the first attempt).Select the project and click on properties.

3, Right click on the project and select "Build Deployment Package". Visual studio will build the deployment package (zip file) and will store in the default location.

4, Open IIS manager(type "inetmgr" in Run command), Right click on the target website (where you want to deploy you Asp.net application),Select deploy=>Import application

5, Browse the deployment package file (the Zip file) to select it and select "Next" buttons on wizard steps and click the "**finish**" button on the last step. You can alter the connection string in wizards steps.

6, Now Browse your website from the IIS.

Approach 2: Publish option from Visual studio.

You need to create a simple website in iis, but careful about Application Pool version if your application version is less than 4.0 then Pool version should be 2.0.

Then from VS Right click on application and select **publish** Option

A form will appear where you need to provide some basic information

click on the "Publish" button to publish the web application.

4. What is a virtual directory and what is its role? What Is The Execution Permission For Virtual Directory? Deploy website with Virtual Directory
Ans:A virtual directory is a friendly name, or alias, either for a physical directory on your server hard drive that does not reside in the home directory.

Because an alias is usually shorter than the path of the physical directory, it is more convenient for users to type.

A **virtual directory** receives queries and directs them to the appropriate data sources by abstracting and virtualizing data. The **virtual directory** integrates identity data from multiple heterogeneous data stores and presents it as though it were coming from one source..

There are three execution permission available

1.None

2.scripts only

3.Scripts and executable

Deploy website with Virtual Directory

- ❖ Add your application files
- ❖ Add your Website
- ❖ Configure Web Site Bindings
- ❖ Configure Access Flags for your Web Site
- ❖ Set up default documents for your application
- ❖ Enable FTP access
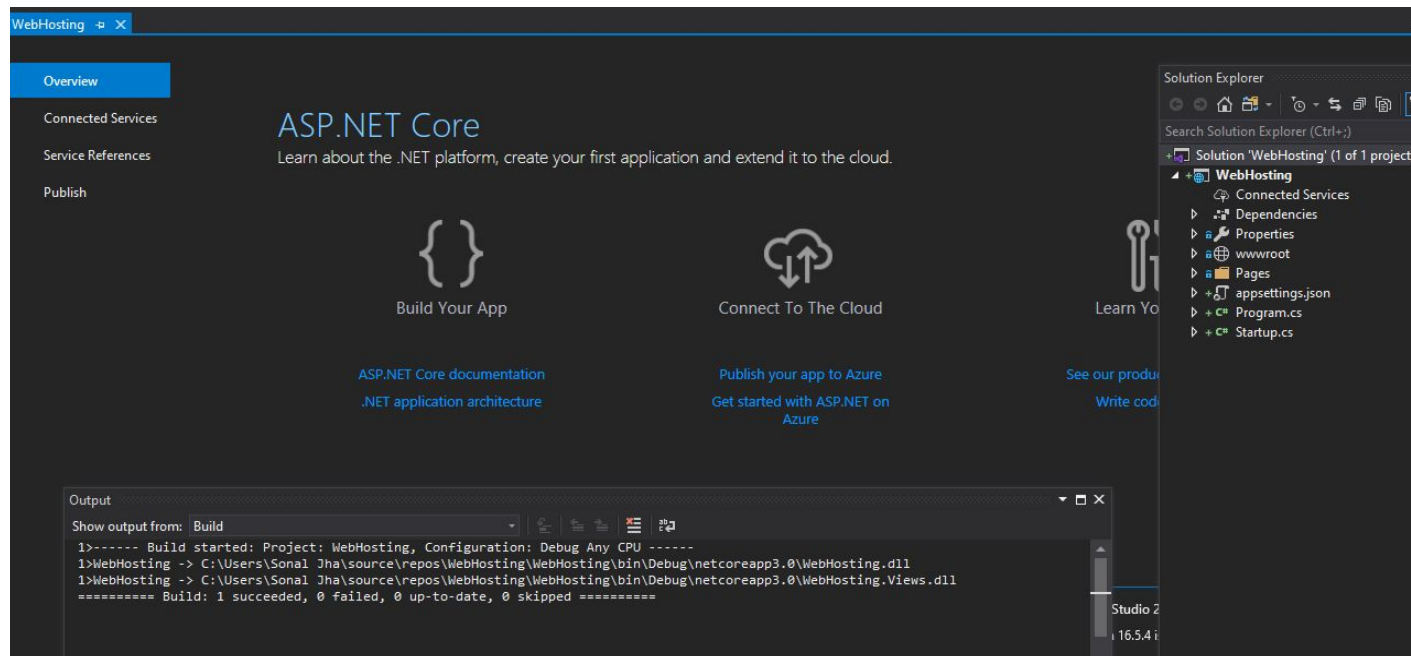- ❖ Configure Virtual Directory

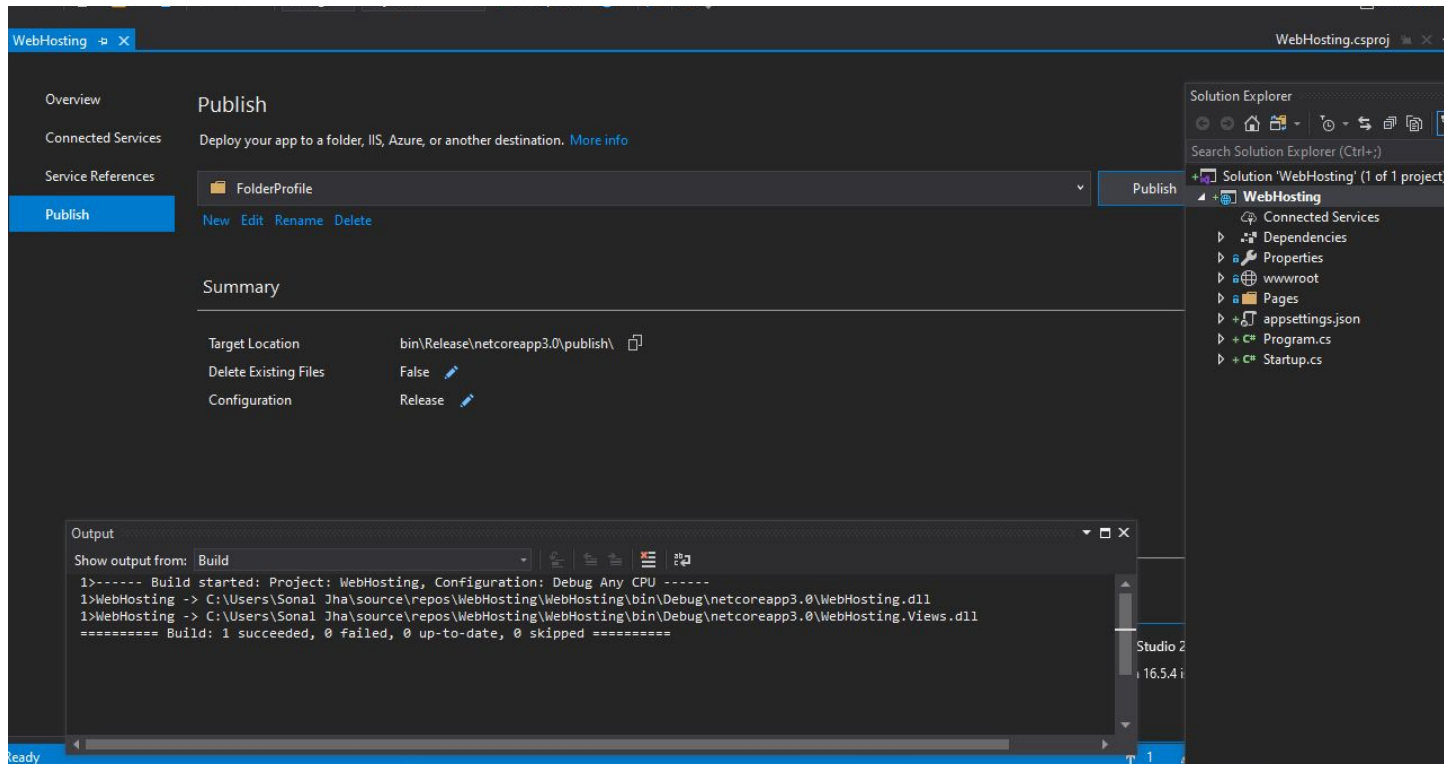❖ Configure global IIS settings (optional)
❖ Run the project

5. Create a asp .net core web application and deploy on the IIS Server by using hostName as of your name. Explain all the steps in document

Ans:Steps:

1.We will first make the website by using ASP.NET Core on Visual Studio.

2.Then Build the project and publish it with the same location as what came by default.

3.Then we will go to the IIS Manager, make an Application Pool and in site we'll new website and then give that website a name and then give the path in which you made the folder for hosting and then give Hosting name.

4. Then open NotePad with administrator then go to C:\Windows\System32\drivers\etc and then in the right side make all files you will get hosting's name file then open it.

5.Now,Add Ip and hosting name.
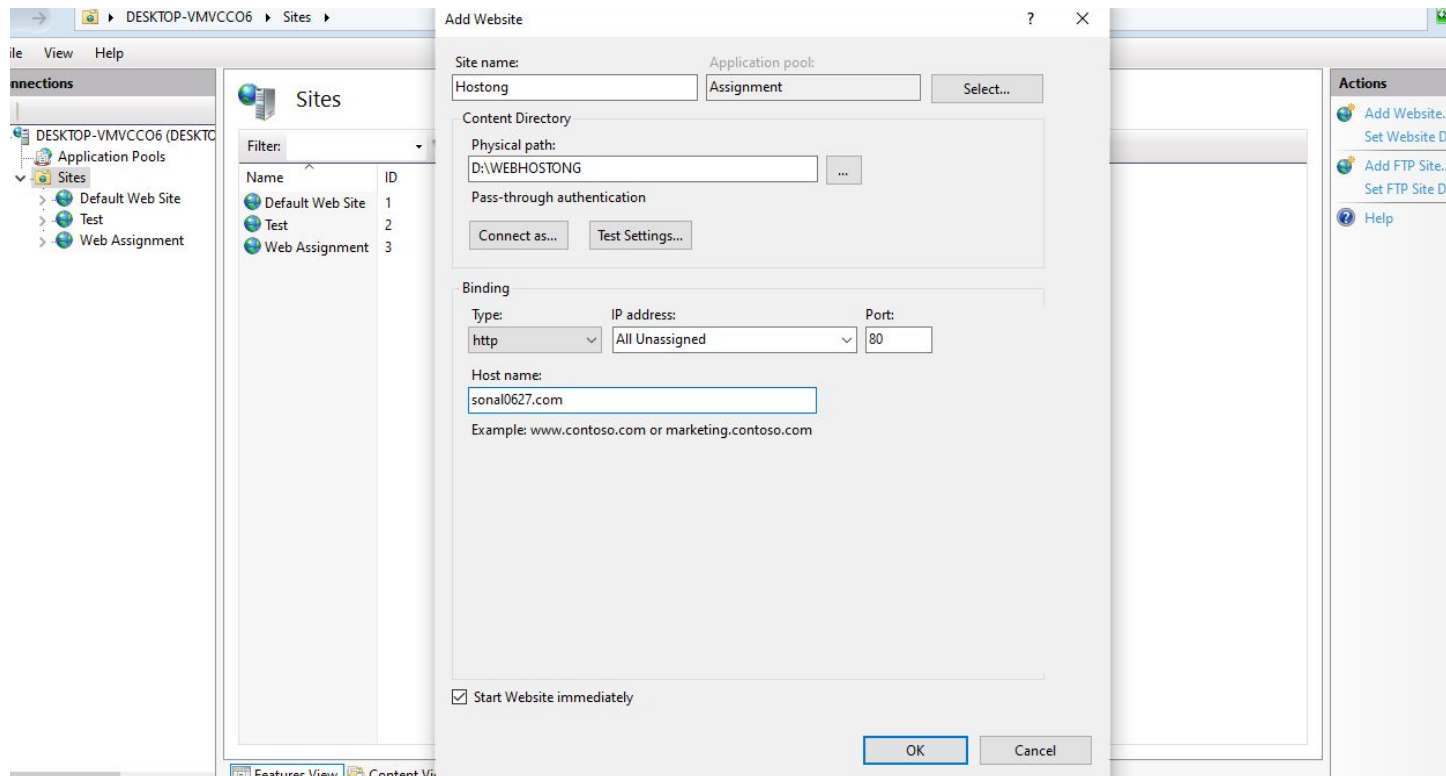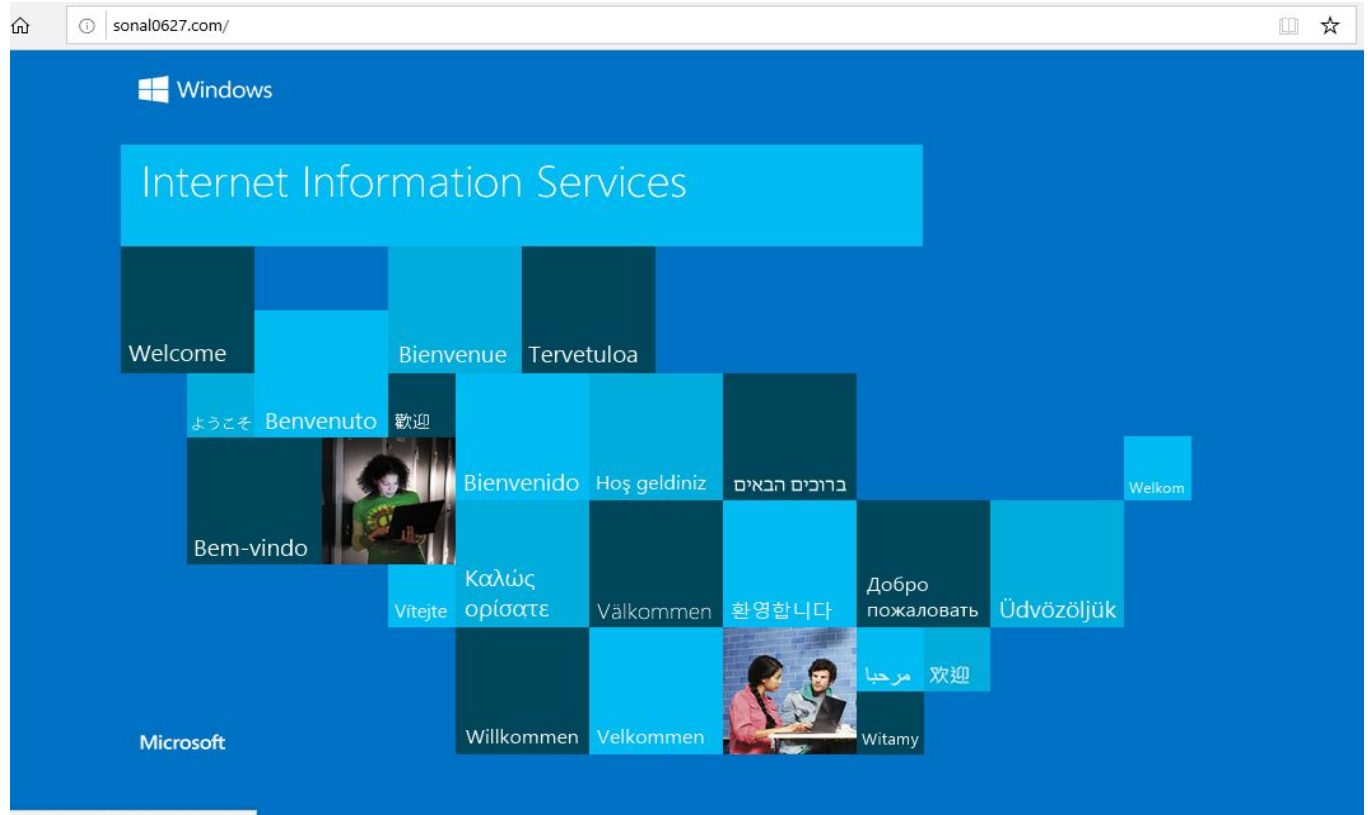
6.Then come bad to IIS Manager and browse it.

LINK:http://sonal0627.com/

Add Website dialog:

Site name: Hostong
Application pool: Assignment   [Select...]

Content Directory
Physical path: D:\WEBHOSTONG   [...]

Pass-through authentication
[Connect as...]   [Test Settings...]

Binding
Type: http   IP address: All Unassigned   Port: 80
Host name: sonal0627.com
Example: www.contoso.com or marketing.contoso.com

☑ Start Website immediately

[OK]   [Cancel]

Connections
DESKTOP-VMVCCO6 (DESKTO
  Application Pools
  Sites
    Default Web Site
    Test
    Web Assignment

Sites
Filter:
Name	ID
Default Web Site	1
Test	2
Web Assignment	3

Actions
Add Website.
Set Website D
Add FTP Site.
Set FTP Site D
Help

---

hosts - Notepad

File Edit Format View Help

```
# 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
        127.0.0.1 sonal0627.com
```
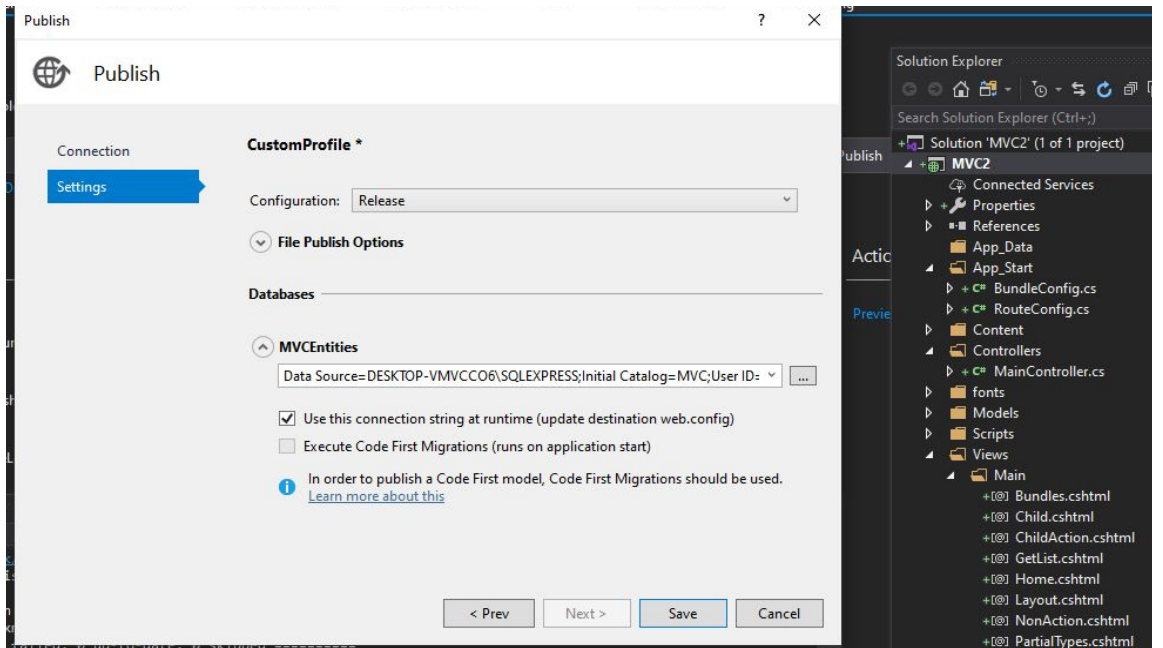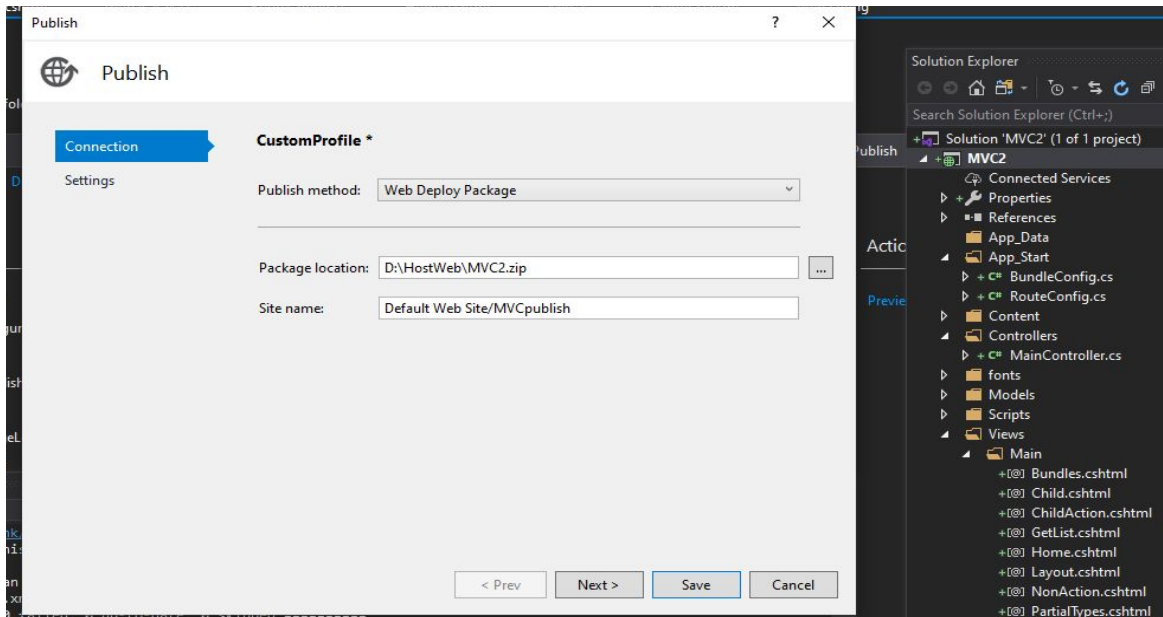
Ln 22, Col 21   100%   Windows (CRLF)   UTF-8

6. Deploy website using Web Deploy package OR Web Deploy with database. Explain the steps with explanations.
ANS:By Using Web Deploy Package
LINK:http://localhost/MVCpublish

Publish

CustomProfile *

Connection

Settings

Publish method: Web Deploy Package

Package location: D:\HostWeb\MVC2.zip

Site name: Default Web Site/MVCpublish

< Prev   Next >   Save   Cancel

Solution Explorer

Search Solution Explorer (Ctrl+;)

Solution 'MVC2' (1 of 1 project)
MVC2
  Connected Services
  Properties
  References
  App_Data
  App_Start
    BundleConfig.cs
    RouteConfig.cs
  Content
  Controllers
    MainController.cs
  fonts
  Models
  Scripts
  Views
    Main
      Bundles.cshtml
      Child.cshtml
      ChildAction.cshtml
      GetList.cshtml
      Home.cshtml
      Layout.cshtml
      NonAction.cshtml
      PartialTypes.cshtml

Publish

CustomProfile *

Connection

Settings

Configuration: Release

File Publish Options

Databases

MVCEntities

Data Source=DESKTOP-VMVCCO6\SQLEXPRESS;Initial Catalog=MVC;User ID=

☑ Use this connection string at runtime (update destination web.config)

☐ Execute Code First Migrations (runs on application start)

ℹ In order to publish a Code First model, Code First Migrations should be used.
Learn more about this

< Prev   Next >   Save   Cancel

Solution Explorer

Search Solution Explorer (Ctrl+;)

Solution 'MVC2' (1 of 1 project)
MVC2
  Connected Services
  Properties
  References
  App_Data
  App_Start
    BundleConfig.cs
    RouteConfig.cs
  Content
  Controllers
    MainController.cs
  fonts
  Models
  Scripts
  Views
    Main
      Bundles.cshtml
      Child.cshtml
      ChildAction.cshtml
      GetList.cshtml
      Home.cshtml
      Layout.cshtml
      NonAction.cshtml
      PartialTypes.cshtml

```
            2 Dir(s)  289,328,738,304 bytes free

D:\HostWeb>MVC2.deploy.cmd /T
SetParameters from:
"D:\HostWeb\MVC2.SetParameters.xml"
You can change IIS Application Name, Physical path, connectionString
or other deploy parameters in the above file.
----------------------------------------------
 Start executing msdeploy.exe
----------------------------------------------
 "C:\Program Files\IIS\Microsoft Web Deploy V3\msdeploy.exe" -source:package='D:\HostWeb\MVC2.zip' -dest:auto,includeAcls="False" -verb:sync -disableLink:AppPoolExtensi
on -disableLink:ContentExtension -disableLink:CertificateExtension -setParamFile:"D:\HostWeb\MVC2.SetParameters.xml" -whatif
Info: Updating file (Default Web Site/MVCpublish/bin/MVC2.dll).
Info: Updating file (Default Web Site/MVCpublish/bin/MVC2.pdb).
Info: Adding ACLs for path (Default Web Site/MVCpublish)
Info: Adding ACLs for path (Default Web Site/MVCpublish)
Total changes: 4 (0 added, 0 deleted, 4 updated, 0 parameters changed, 46592 bytes copied)

D:\HostWeb>MVC2.deploy.cmd /Y
SetParameters from:
"D:\HostWeb\MVC2.SetParameters.xml"
You can change IIS Application Name, Physical path, connectionString
or other deploy parameters in the above file.
----------------------------------------------
 Start executing msdeploy.exe
----------------------------------------------
 "C:\Program Files\IIS\Microsoft Web Deploy V3\msdeploy.exe" -source:package='D:\HostWeb\MVC2.zip' -dest:auto,includeAcls="False" -verb:sync -disableLink:AppPoolExtensi
on -disableLink:ContentExtension -disableLink:CertificateExtension -setParamFile:"D:\HostWeb\MVC2.SetParameters.xml"
Info: Updating file (Default Web Site/MVCpublish/bin/MVC2.dll).
Info: Updating file (Default Web Site/MVCpublish/bin/MVC2.pdb).
Info: Adding ACLs for path (Default Web Site/MVCpublish)
Info: Adding ACLs for path (Default Web Site/MVCpublish)
Total changes: 4 (0 added, 0 deleted, 4 updated, 0 parameters changed, 46592 bytes copied)
```

• HomeQuestions

Home

Home page
In order to proceed clickon the navlink "Questions".

Submit By : Sonal Jha
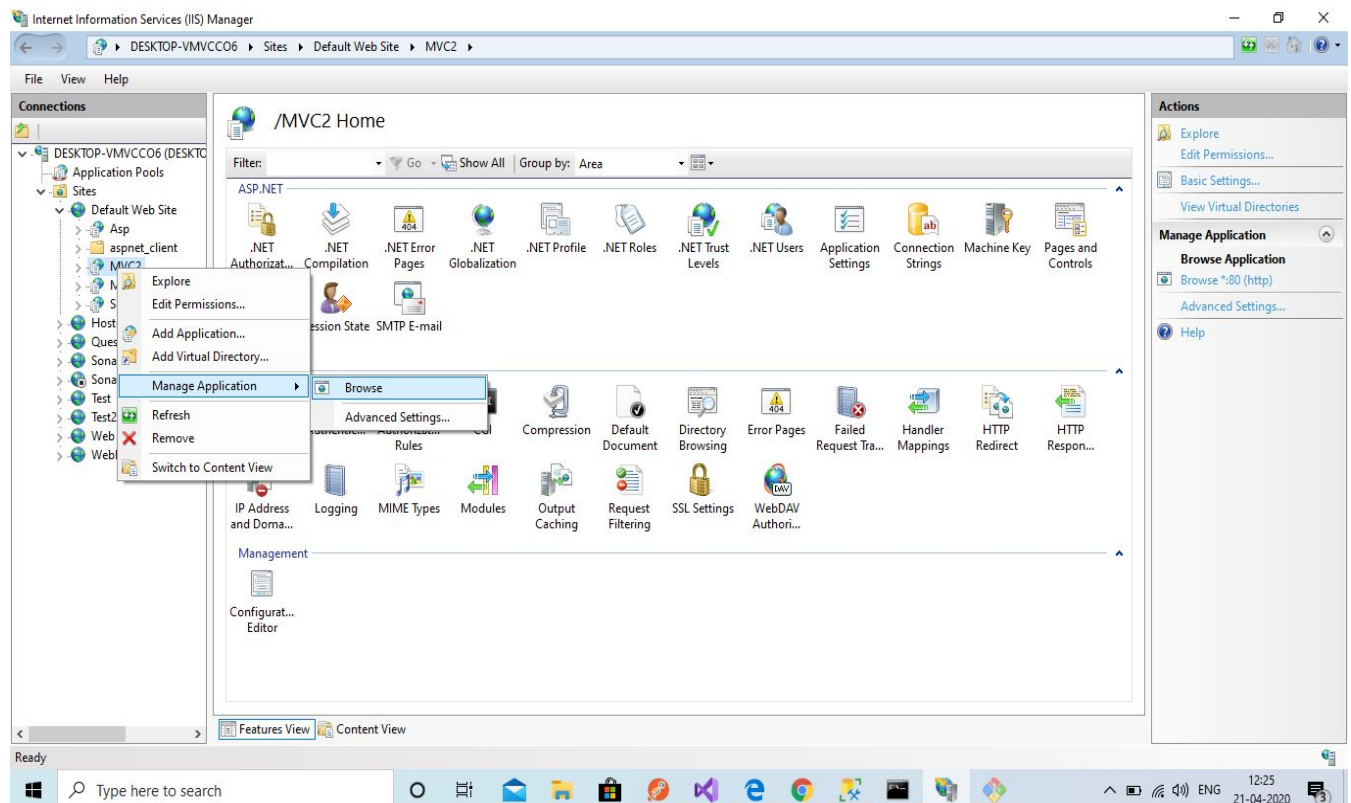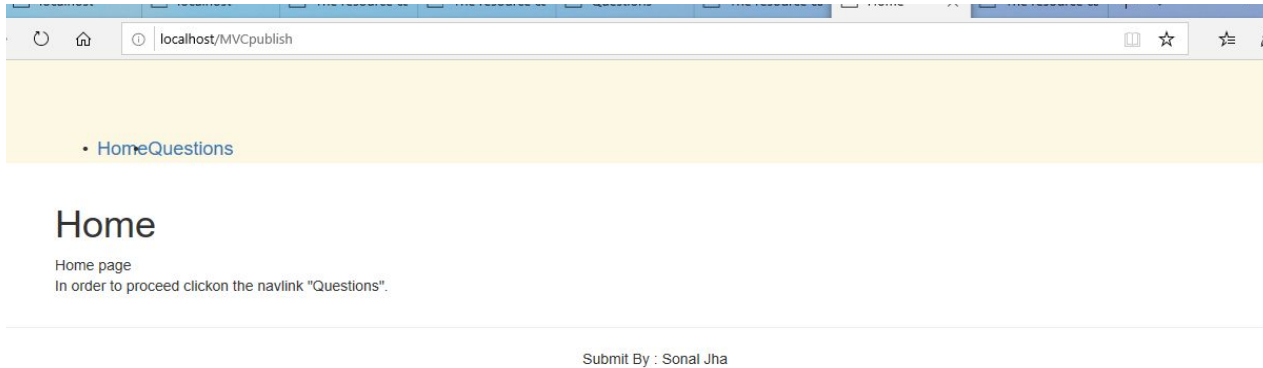
7. Deploy website using File system OR folder with SSL certificate. Explain all the steps in document
Ans:Steps:
1.We will first make the website by using ASP.NET Core on Visual Studio.
2.Then Build the project and publish it with the same location as what came by default.
3.Then we will go to the IIS Manager, make an Application Pool and in site we'll create a new website and then give that website a name and then give the path in which you made the folder for hosting and then give Hosting name.
4. Then open NotePad with administrator then go to C:\Windows\System32\drivers\etc and then in the right side make all files you will get hosting's name file then open it.
5.Now,Add Ip and hosting name.
6.Then come bad to IIS Manager and go to Edit Bindings and select Add option and the select HTTPS and then go to ssl certificate and select IIS Express Development Certificate and then close it.
7.Then go to Ation side and browse the name with https.

LINK:https://localhost/

WebHosting

Overview
Connected Services
Service References
Publish

ASP.NET Core

Learn about the .NET platform, create your first application and extend it to the cloud.

{ }
Build Your App

Connect To The Cloud

Learn Yo

ASP.NET Core documentation
.NET application architecture

Publish your app to Azure
Get started with ASP.NET on Azure

See our produ
Write cod

Output

Show output from: Build

```
1>------ Build started: Project: WebHosting, Configuration: Debug Any CPU ------
1>WebHosting -> C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\bin\Debug\netcoreapp3.0\WebHosting.dll
1>WebHosting -> C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\bin\Debug\netcoreapp3.0\WebHosting.Views.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
```

Solution Explorer

Search Solution Explorer (Ctrl+;)

Solution 'WebHosting' (1 of 1 project)
- WebHosting
  - Connected Services
  - Dependencies
  - Properties
  - wwwroot
  - Pages
  - appsettings.json
  - Program.cs
  - Startup.cs

Studio 2
16.5.4 i

WebHosting
WebHosting.csproj

Overview
Connected Services
Service References
Publish

Publish

Deploy your app to a folder, IIS, Azure, or another destination. More info

FolderProfile ▾   Publish

New Edit Rename Delete

Summary

Target Location	bin\Release\netcoreapp3.0\publish\
Delete Existing Files	False
Configuration	Release

Output

Show output from: Build

```
1>------ Build started: Project: WebHosting, Configuration: Debug Any CPU ------
1>WebHosting -> C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\bin\Debug\netcoreapp3.0\WebHosting.dll
1>WebHosting -> C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\bin\Debug\netcoreapp3.0\WebHosting.Views.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
```

Solution Explorer

Search Solution Explorer (Ctrl+;)

Solution 'WebHosting' (1 of 1 project)
- WebHosting
  - Connected Services
  - Dependencies
  - Properties
  - wwwroot
  - Pages
  - appsettings.json
  - Program.cs
  - Startup.cs

Studio 2
16.5.4 i

Ready

```
1>WebHosting -> C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\bin\Release\netcoreapp3.0\WebHosting.Views.dll
2>------ Publish started: Project: WebHosting, Configuration: Release Any CPU ------
Connecting to C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\bin\Release\netcoreapp3.0\publish\...
WebHosting -> C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\bin\Release\netcoreapp3.0\WebHosting.dll
WebHosting -> C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\bin\Release\netcoreapp3.0\WebHosting.Views.dll
WebHosting -> C:\Users\Sonal Jha\source\repos\WebHosting\WebHosting\obj\Release\netcoreapp3.0\PubTmp\Out\
Web App was published successfully file:///C:/Users/Sonal%20Jha/source/repos/WebHosting/WebHosting/bin/Release/netcoreapp3.0/publish/

========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
========== Publish: 1 succeeded, 0 failed, 0 skipped ==========
```
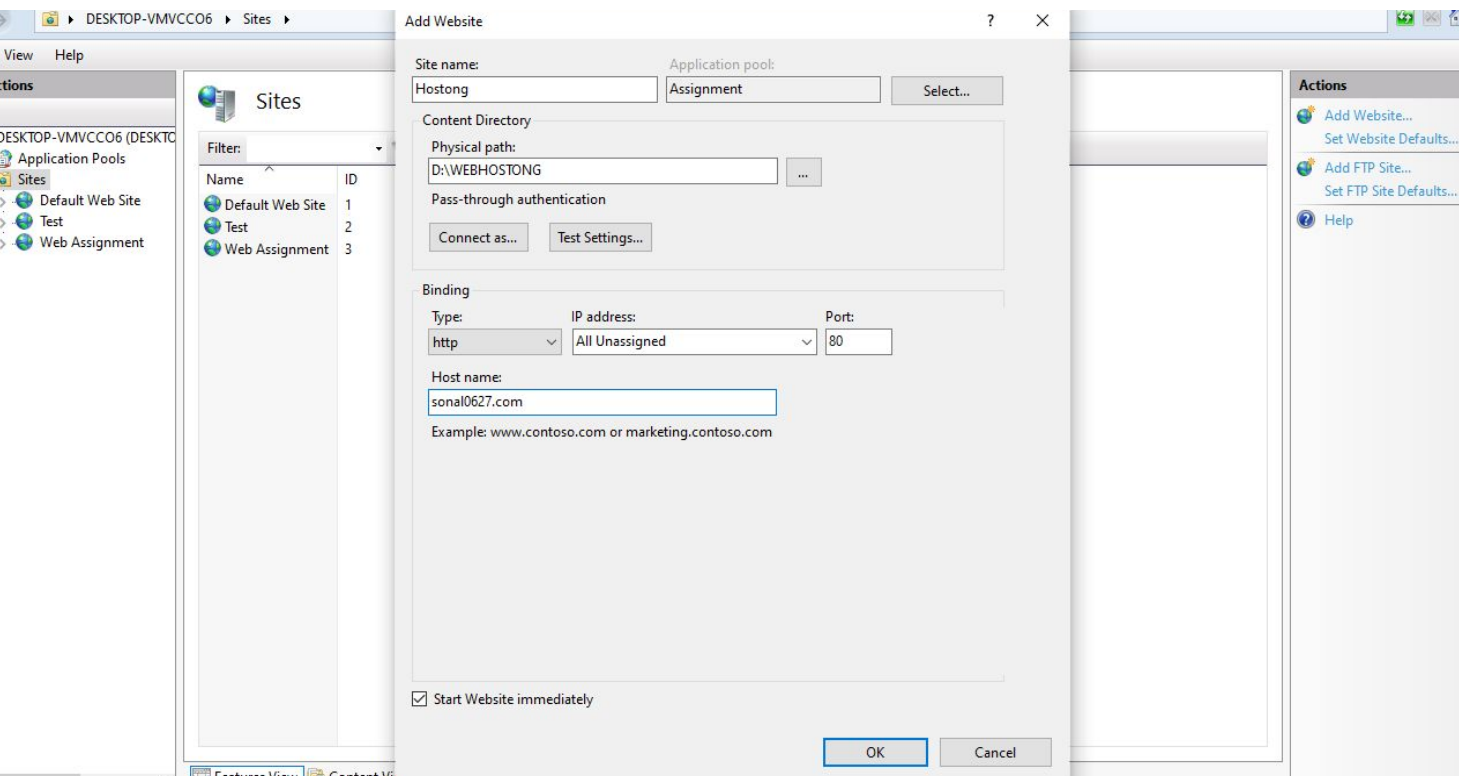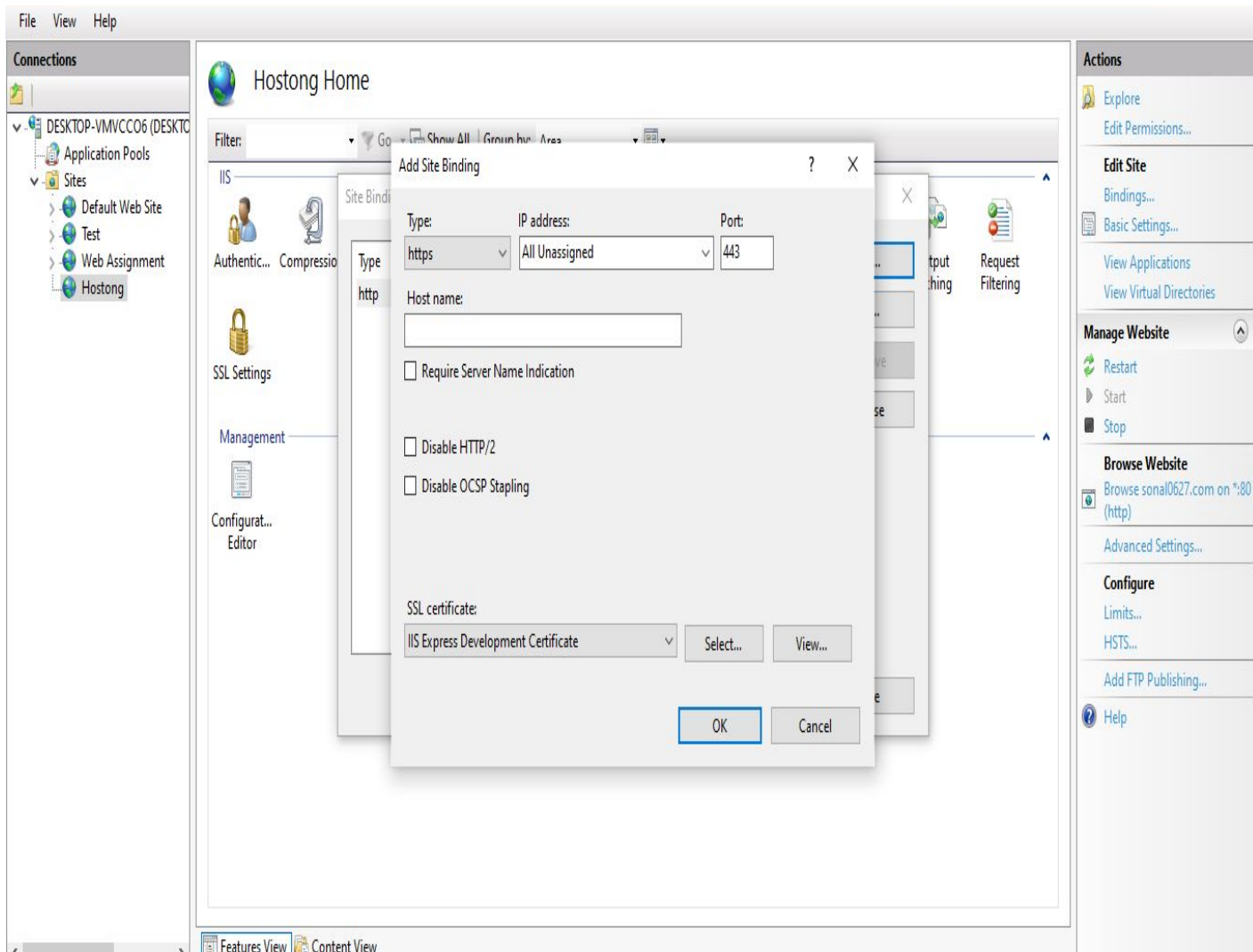
Add Website dialog

Site name: Hostong
Application pool: Assignment [Select...]

Content Directory
Physical path: D:\WEBHOSTONG [...]
Pass-through authentication
[Connect as...] [Test Settings...]

Binding
Type: http
IP address: All Unassigned
Port: 80
Host name: sonal0627.com
Example: www.contoso.com or marketing.contoso.com

☑ Start Website immediately

[OK] [Cancel]

Sites
Filter:
Name	ID
Default Web Site	1
Test	2
Web Assignment	3

Actions
Add Website...
Set Website Defaults...
Add FTP Site...
Set FTP Site Defaults...
Help

---

*hosts - Notepad

File Edit Format View Help

```
# 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
        127.0.0.1 sonal0627.com
```

Ln 22, Col 21   100%   Windows (CRLF)   UTF-8

Connections

- DESKTOP-VMVCCO6 (DESKTO
  - Application Pools
  - Sites
    - Default Web Site
    - Test
    - Web Assignment
    - Hostong

Hostong Home

Filter: [   ] Go ▾ Show All | Group by: Area ▾

IIS

Authentic... Compressio

SSL Settings

Management

Configurat...
Editor

Site Bindings   ? X

Type	Host Name	Port	IP Address	Binding Informa...
http	sonal0627.com	8082	*	
https		4431	*	

Add...

Edit...

Remove

Browse

Close

tput   Request
hing   Filtering

Actions

Explore
Edit Permissions...

Edit Site
Bindings...
Basic Settings...

View Applications
View Virtual Directories

Manage Website
Restart
Start
Stop

Browse Website
Browse sonal0627.com on *:8082 (http)
Browse *:4431 (https)

Advanced Settings...

Configure
Limits...
HSTS...

Add FTP Publishing...

Help

https://localhost/

sting1   Home   Privacy

Welcome

Learn about building Web apps with ASP.NET Core.