Question

Ques1. What is the role of IIS and how IIS Server works? Please describe properly about working with proper steps and explain Architecture. - 1 mark

Answer. 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 browser 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 pf 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.

Ques2. What is Application pool in IIS and how to create and assign Application pool to a website. Please explain in detail with example. - 1 mark

Answer: 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 some thing on the server [may be writes 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 network by IP also.

Ques 3:What are the different ways of deploying Asp .net application on IIS. Describe briefly

Answer: 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 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.

Ques4. What is a virtual directory and what is its role? What is The Execution Permission For Virtual Directory? Deploy website with Virtual Directory - 1 mark

Answer. 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

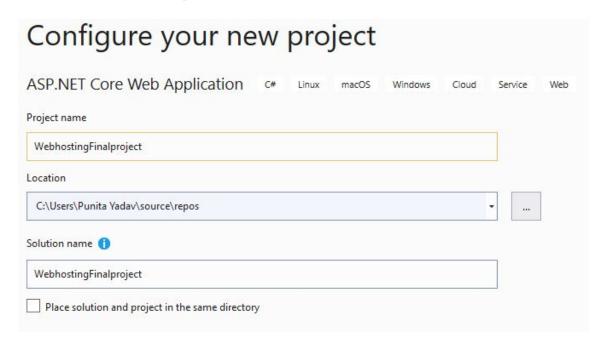
- 1.None
- 2.scripts only
- 3. Scripts and executable

Deploy website with Virtual Directory

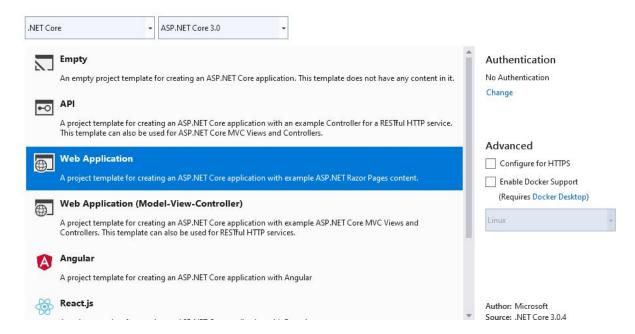
- Add your application files
- * Add your Website
- Configure Web Site Bindings
- Configure Access Flags for your Web Site
- Set up default documents for your application
- **❖** Enable FTP access
- Configure Virtual Directory
- Configure global IIS settings (optional)
- Run the project

Ques5. 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 - 2 marks

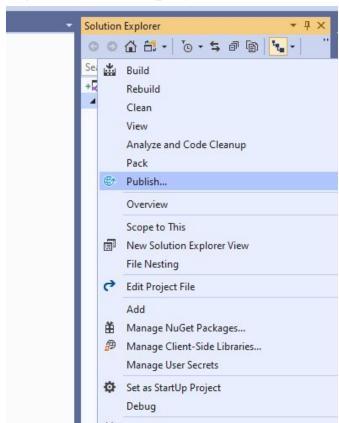
Answer: Create a new core project.

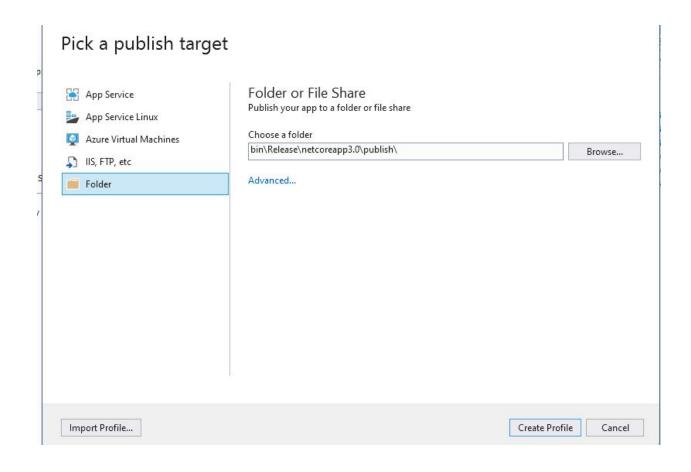


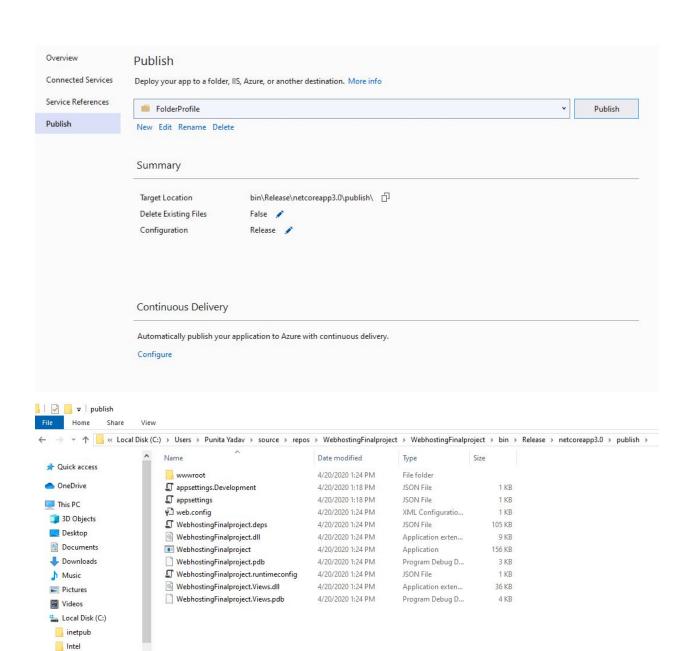
Create a new ASP.NET Core web application



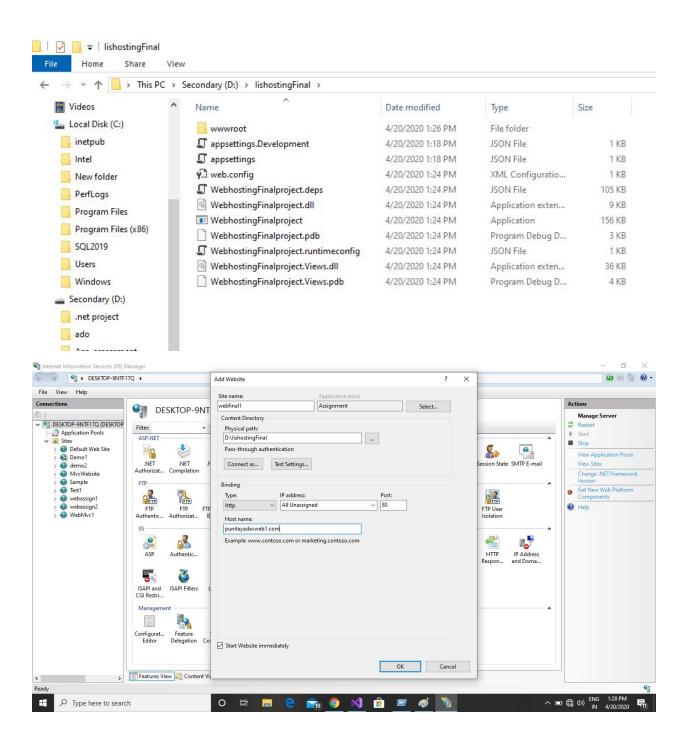
Right Click on the project and then select publish

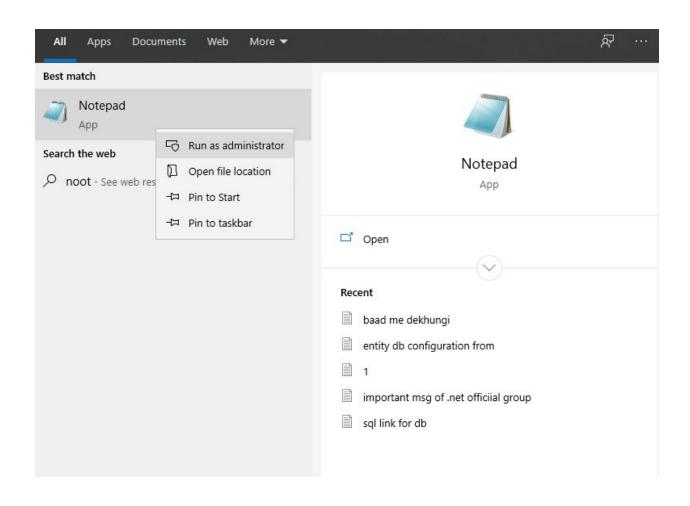


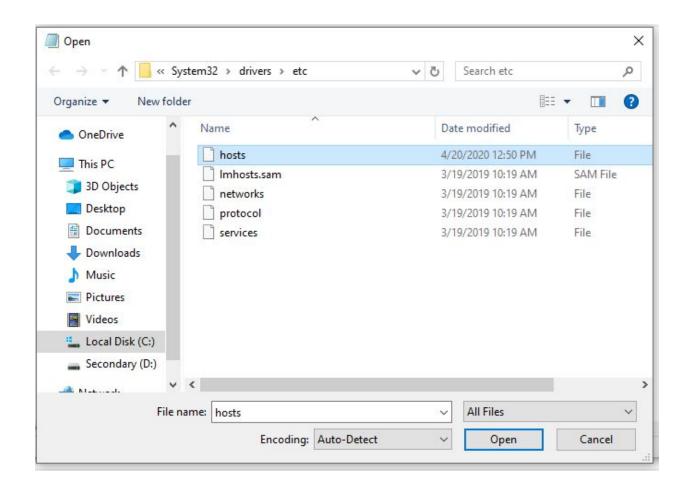




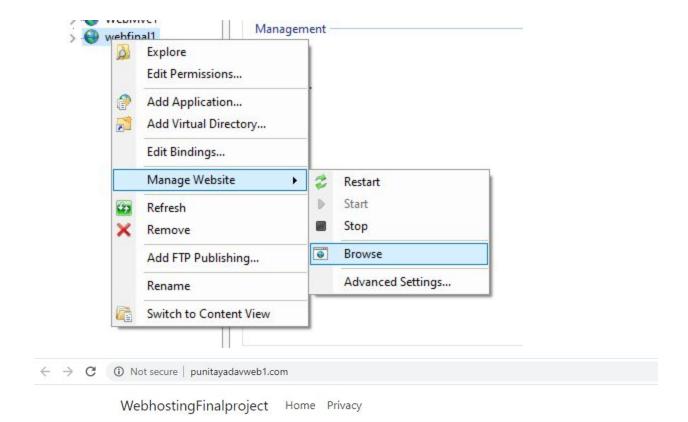
New folder







```
*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
                        x.acme.com
        38.25.63.10
                                                # x client host
# localhost name resolution is handled within DNS itself.
        127.0.0.1
                        localhost
        ::1
                        localhost
127.0.0.1 punitayadavweb1.com
```

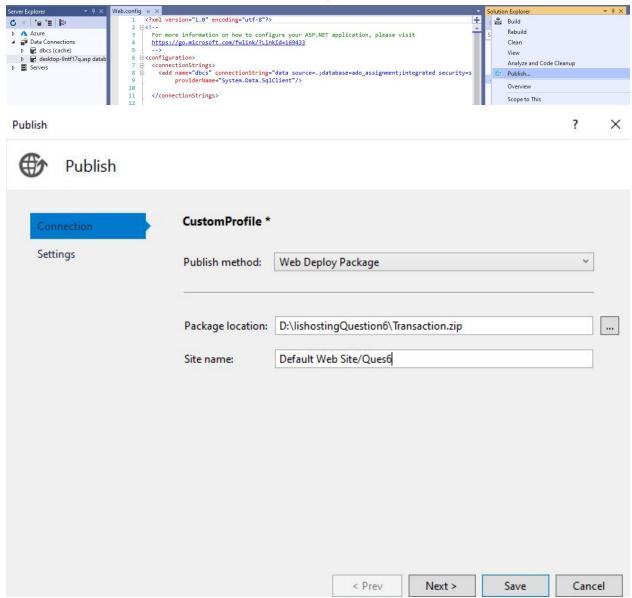


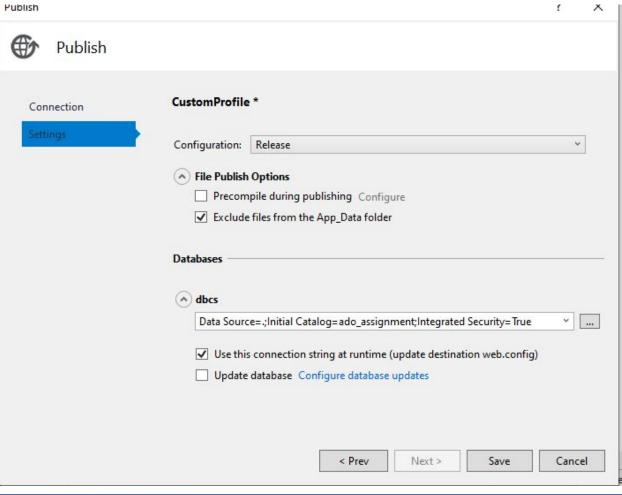
Welcome

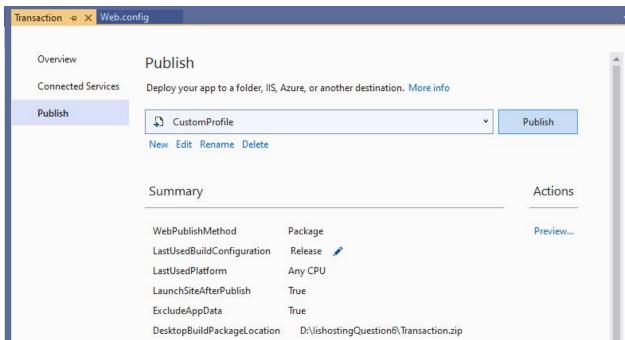
Learn about building Web apps with ASP.NET Core.

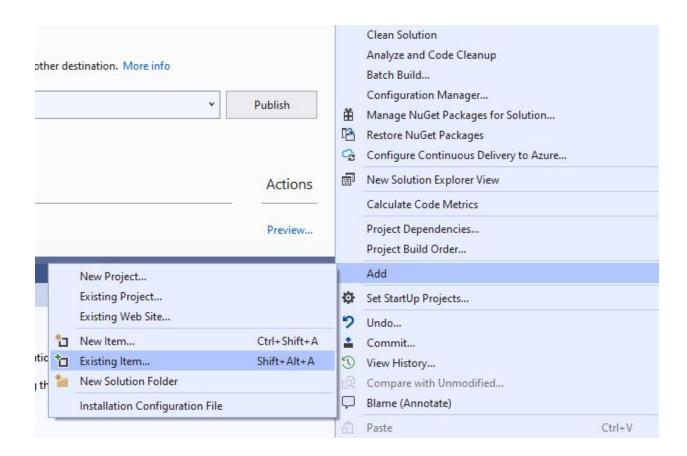
Ques6: Deploy website using Web Deploy package OR Web Deploy with database. Explain the steps with explanations. - 2 marks

Answer: First create a project and add a database in project.

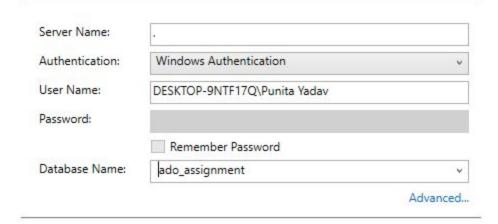


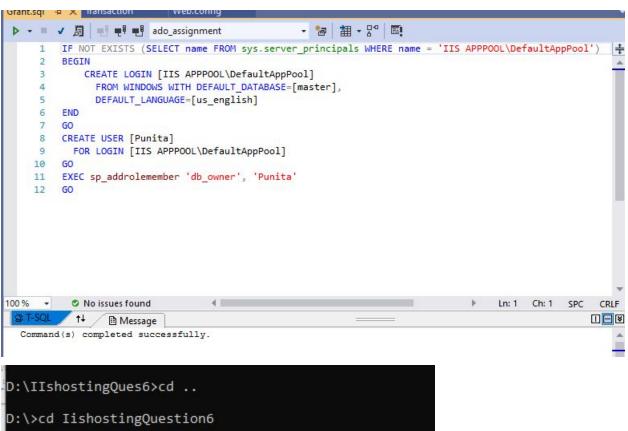










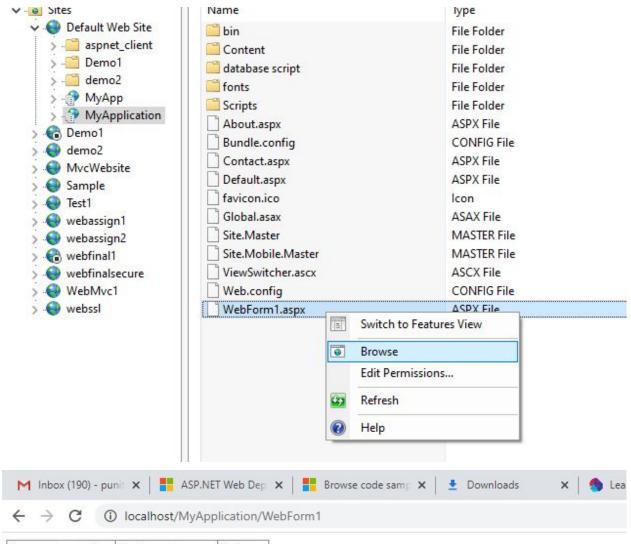


D:\IIshostingQues6>cd ..

D:\>cd IishostingQuestion6

D:\IishostingQuestion6>Transaction.deploy /T_

D:\IishostingQuestion6>Transaction.deploy /Y_

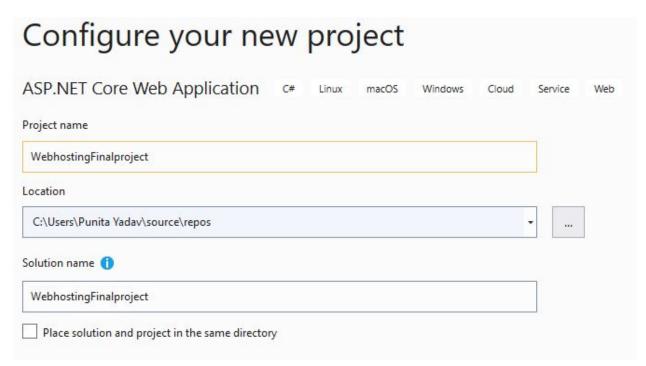


Account_number	Customer_name	Balance
1001	Punita	6200
1002	Pooja	13800

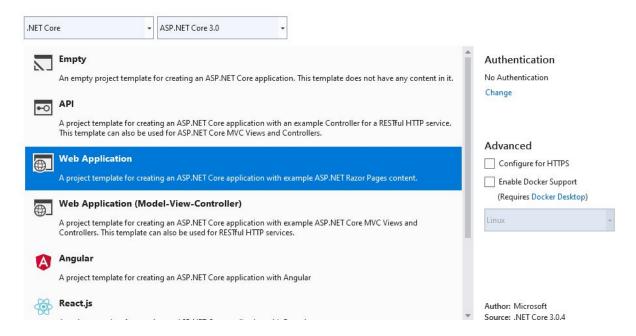
Transfer 100 from 1001 to 1002

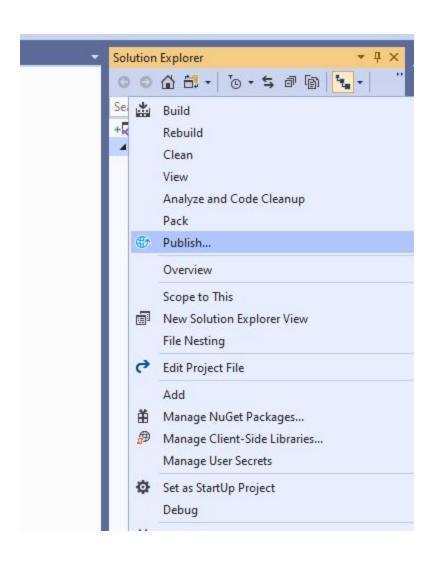
transaction Successful

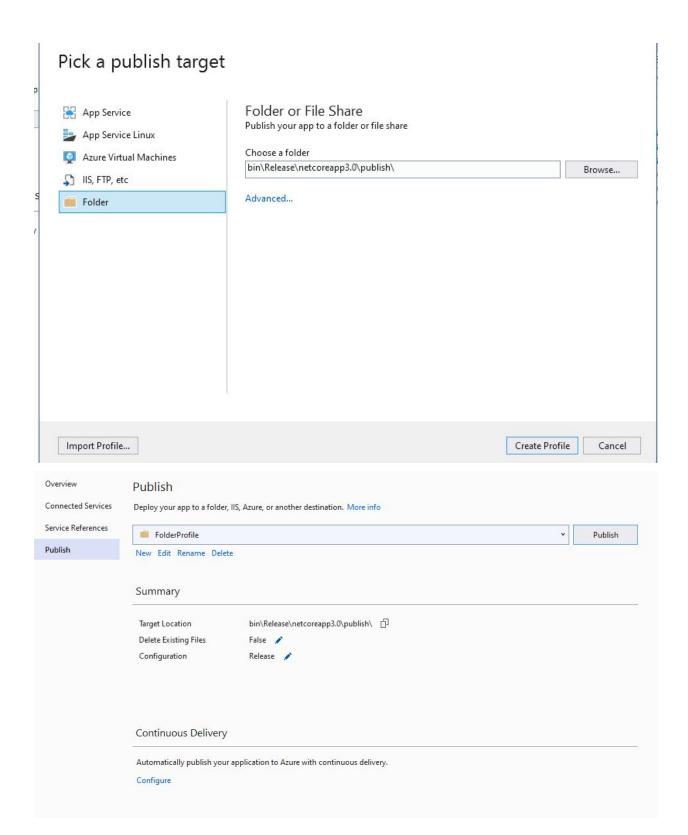
Ques7: Deploy website using File system OR folder with SSL certificate. Explain all the steps in document - 2 marks

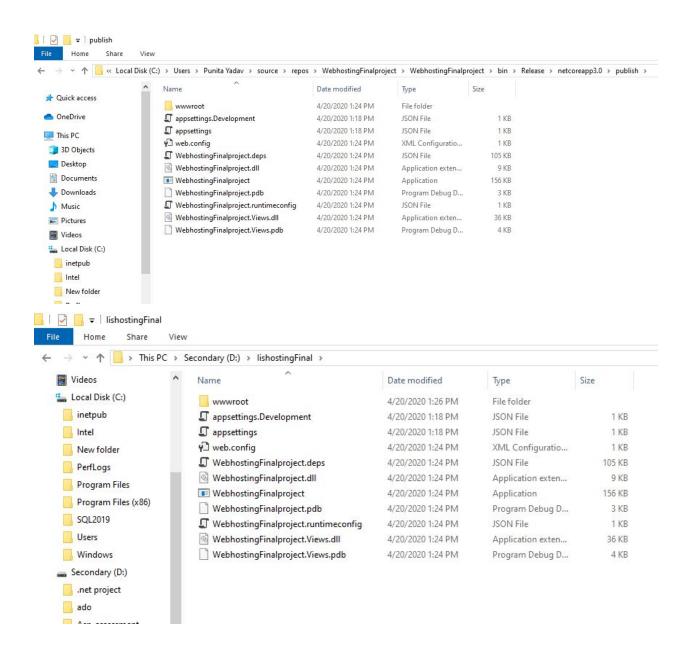


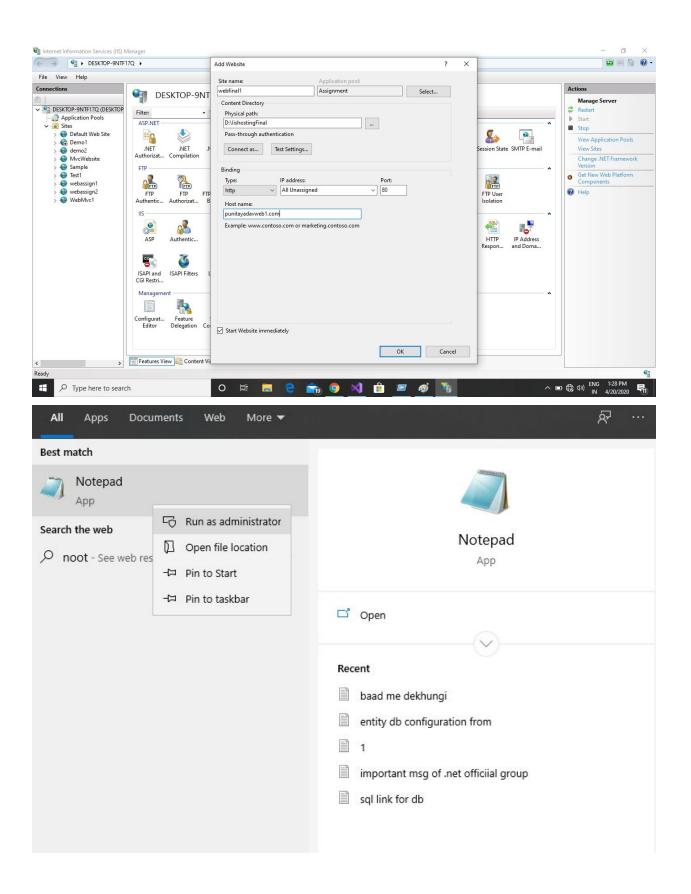
Create a new ASP.NET Core web application

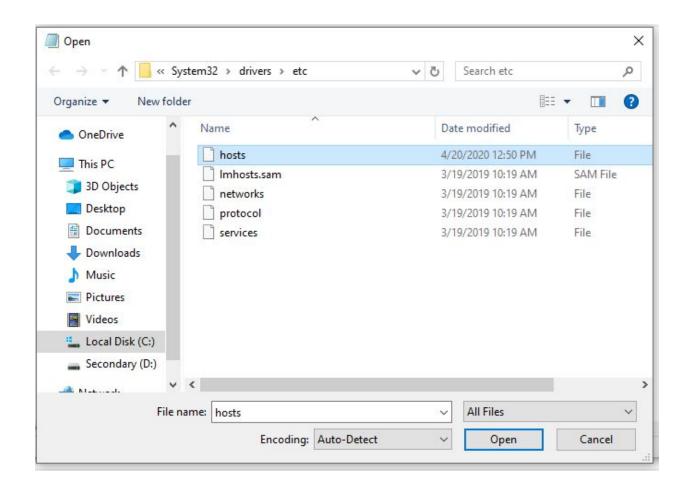




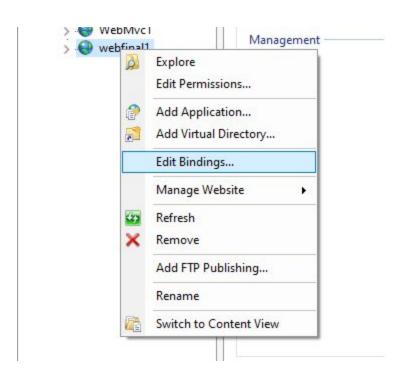


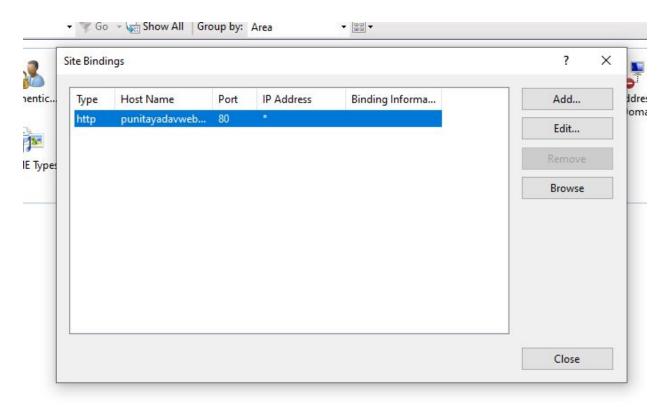


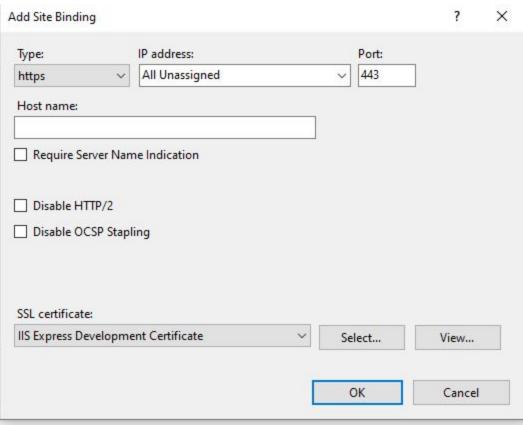


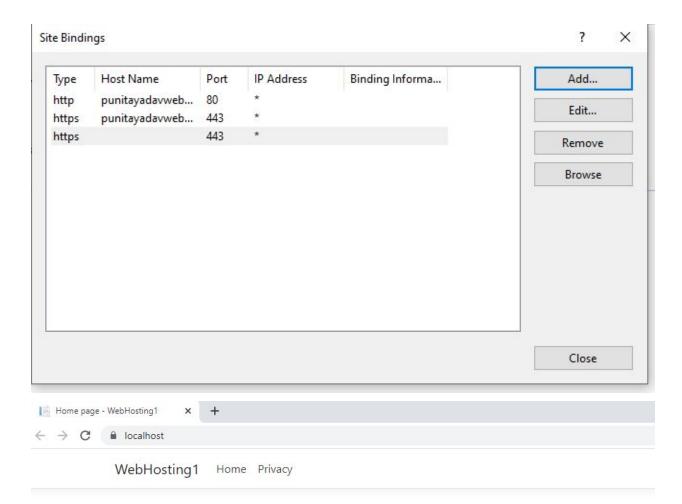


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# For example:
#
                        rhino.acme.com
       102.54.94.97
                                                 # source server
        38.25.63.10
                        x.acme.com
                                                 # x client host
# localhost name resolution is handled within DNS itself.
        127.0.0.1
                        localhost
        ::1
                        localhost
127.0.0.1 punitayadavweb1.com
```









Welcome

Learn about building Web apps with ASP.NET Core.

Ques6. Deploy website using Web Deploy package OR Web Deploy with database
Explain the steps with explanations 2 marks

Answer: