Program - 8
Build a simple web page using PWA by adding a Service Worker

Step 1:
Install the VSCode editor and create a folder:
create folders:
1) js

create start.js inside the js folder:

```
if ('serviceWorker' in navigator) {
        navigator.serviceWorker
        .register("/sw.js")
        .then((reg)=>console.log("registered",reg))
        .catch((err)=>console.log("err",err));
} else {
        console.log('No service worker support in this browser');
}
```

create a manifest.json add icon to the icons folder.

```
{
"name": "Program_8",
"short_name": "Program_8",
"start_url": "/my.html",
"display": "fullscreen",
"background_color": "#ffff00",
"description": "A simple applicationfor manifestation",
"orientation": "portrait-primary",
"theme_color":"#2196F3",
"icons": [
{
"src": "/icons/rvce_logo (1).png",
"sizes": "108x108",
"type": "image/png"
}
]
}
```

create a file myfirst.html

```
<!DOCTYPE html>
<html lang="en">
```

```
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link rel=”manifest” href=”manifest.json”>
<title>program_8</title>
</head>
<body>
<script src="/js/start.js"></script>
Display of images: <p>Image 1 - > <img src="img/bathroomprod.jpg"
width="100" height="100"></p>
<p>Image 2 - > <img src="img/camera.jpg" width="100"
height="100"></p>
<p>Image 3 - > <img src="img/cosmetics.jpg" width="100"
height="100"></p>
<p>Image 4 - > <img src="img/headphone.jpeg" width="100"
height="100"></p>
</body>
</html>
```

Create sw.js ----> ServiceWorker

```
var mycache = "mycache";
var assests = [
      "/",
      "/my.html",
      "/img/bathroomprod.jpg",
      "/img/camera.jpg",
      "/img/headphone.jpeg",
      "/img/cosmetics.jpg",
      "/js/start.js",
      "/sw.js",
      “/manifest.json”,
];

self.addEventListener('install', _event => {
      console.log('inside the install', _event);
      caches.open(mycache)
```

```
        .then(cache => {
                cache.addAll(assests);
        });
});
```

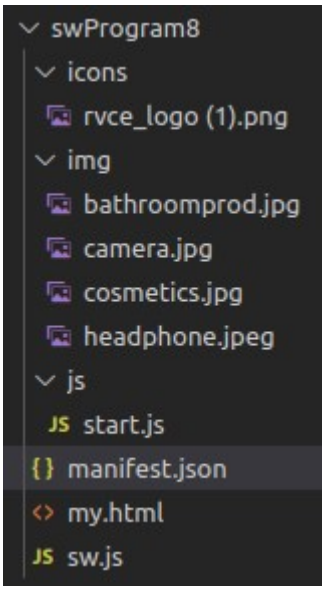
```
self.addEventListener('activate', _event => {
        console.log('inside the activate', _event);
});
```

```
self.addEventListener('fetch', async (event) => {
        event.respondWith(
                caches.match(event.request)
                        .then(respevt => {
                                return respevt || fetch(event.request);
                })
        );
        console.log('inside the fetched', _event);
});
```

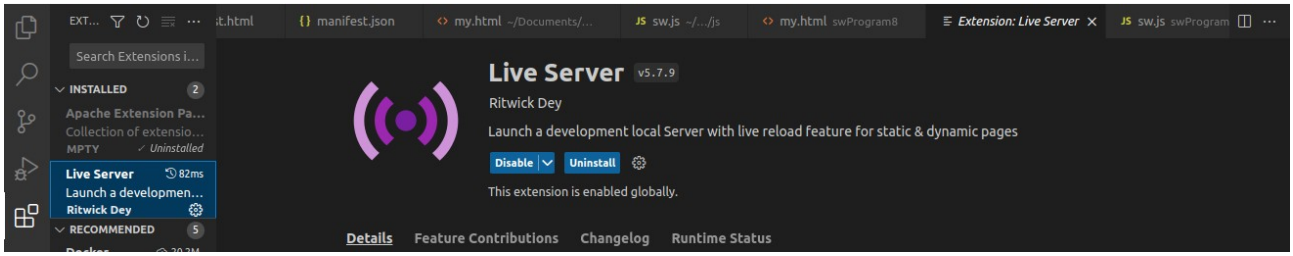
create img folder and files like,

```
“/img/bathroomprod.jpg",
        "/img/camera.jpg",
        "/img/headphone.jpeg",
        "/img/cosmetics.jpg",
```

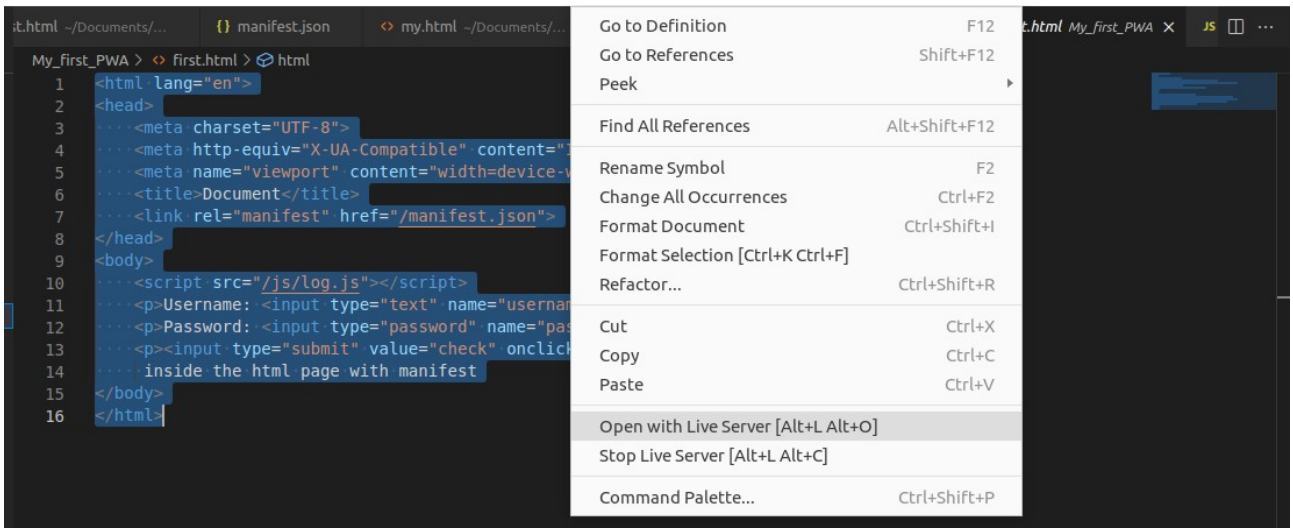
Directory structure:



Install the Live Server

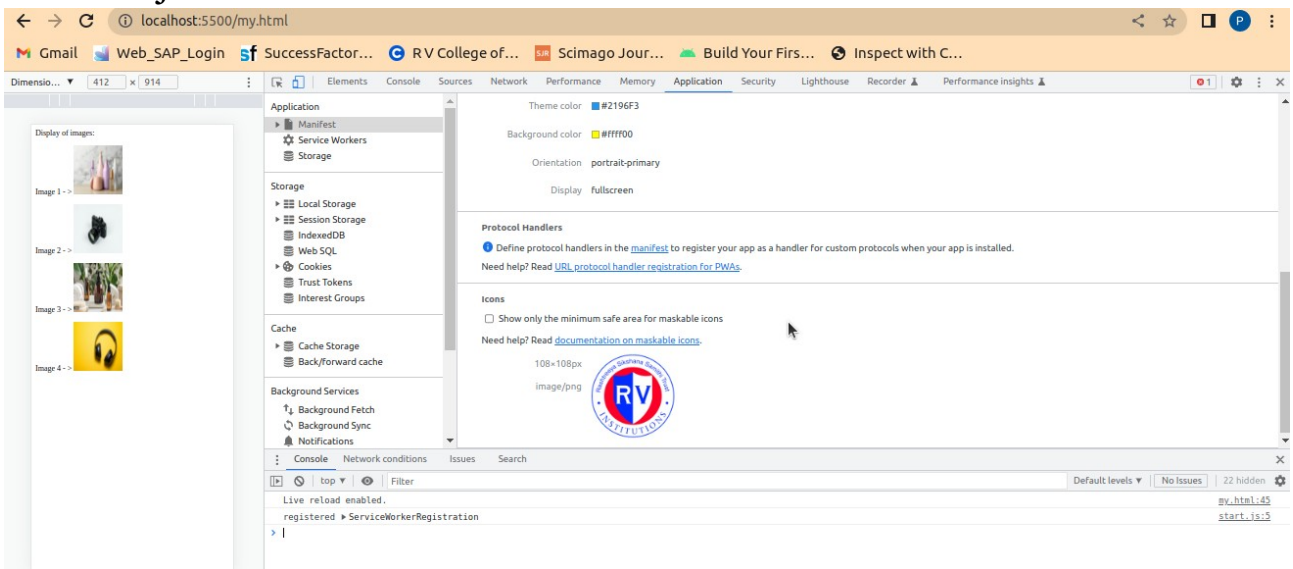


run file on server

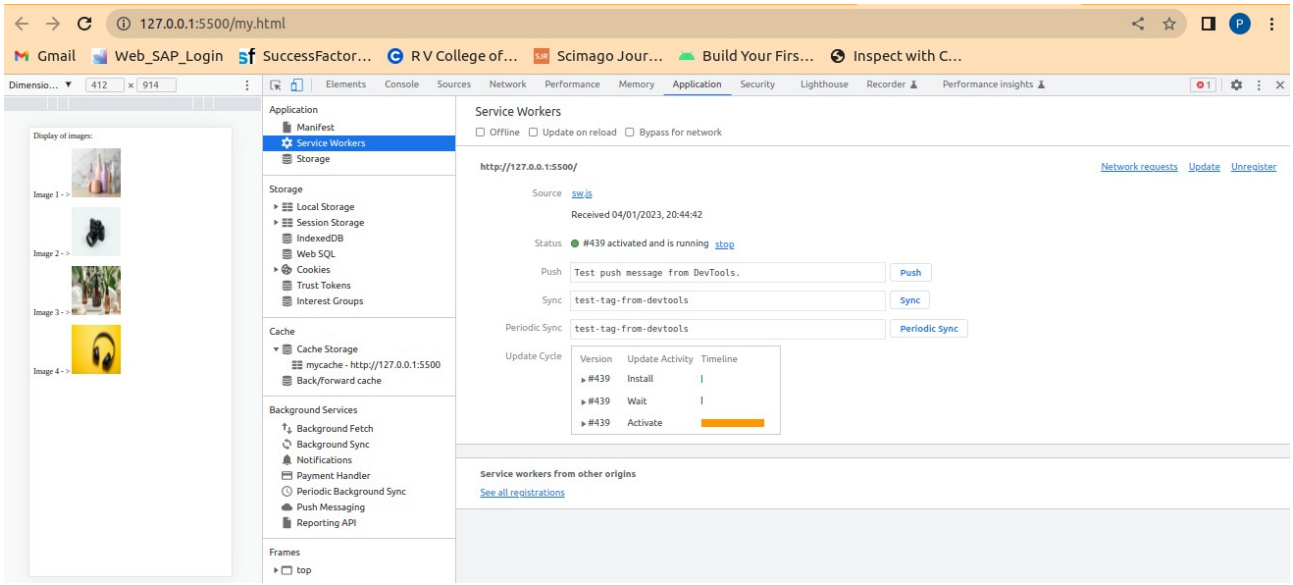


OUPUT:

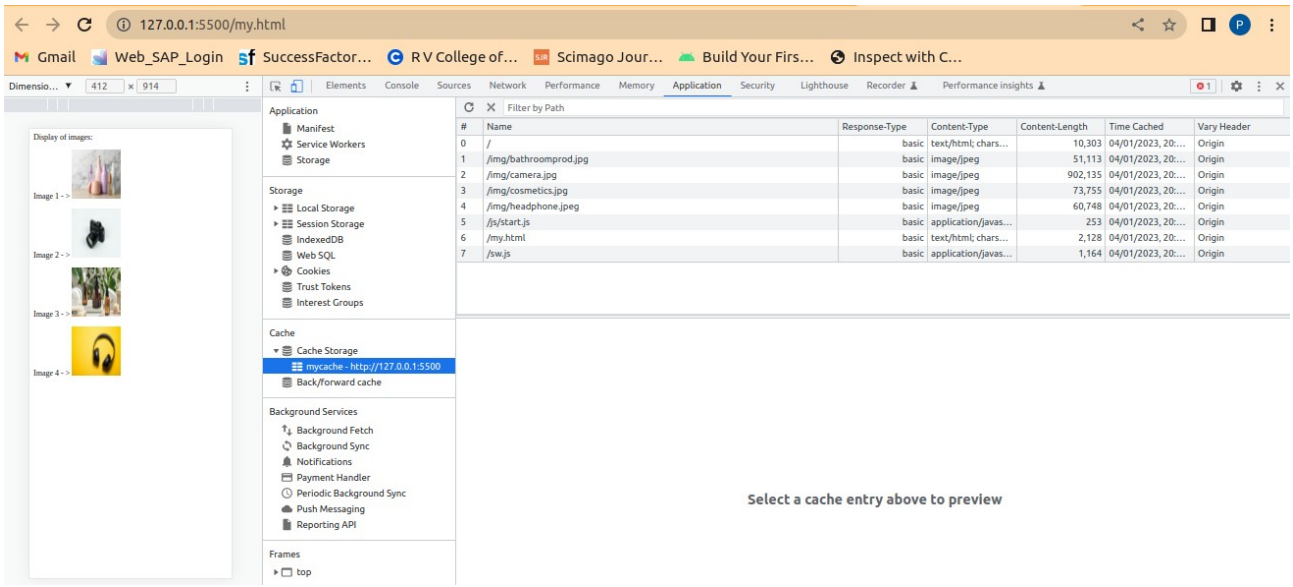
Manifest.json

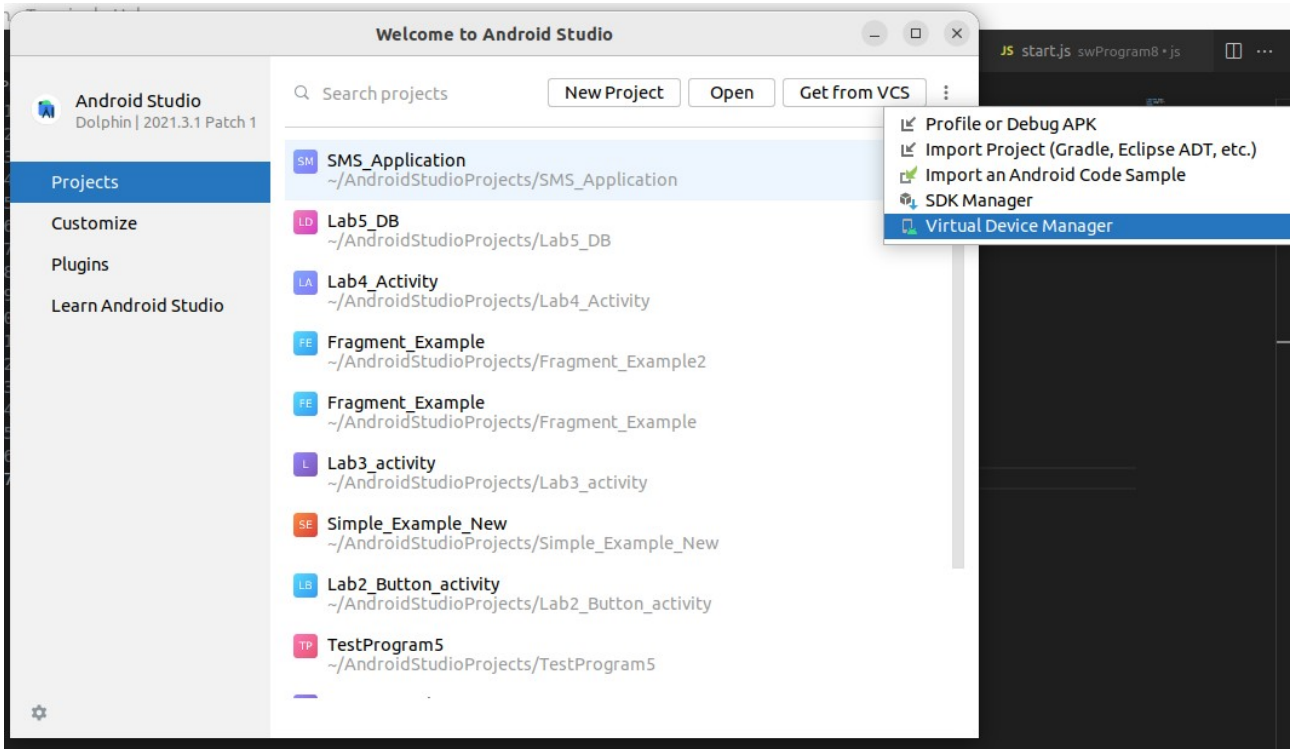


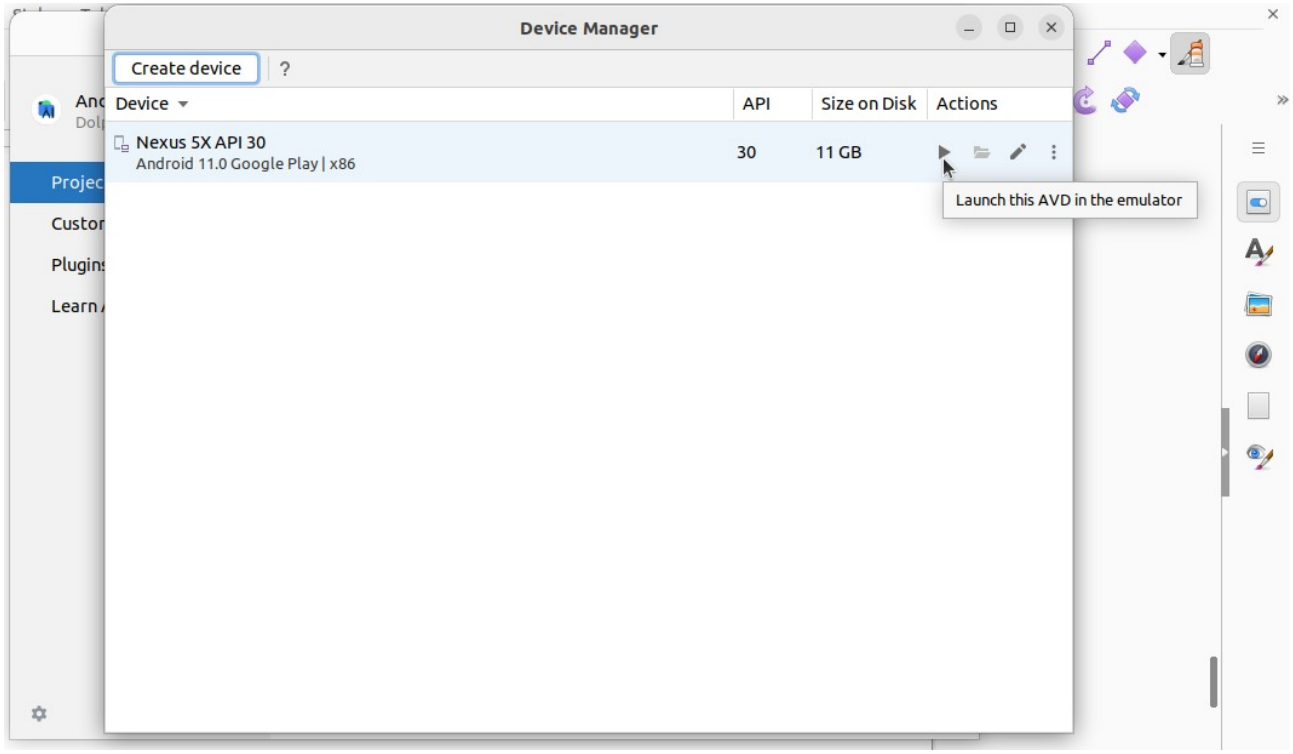
Service Worker running:



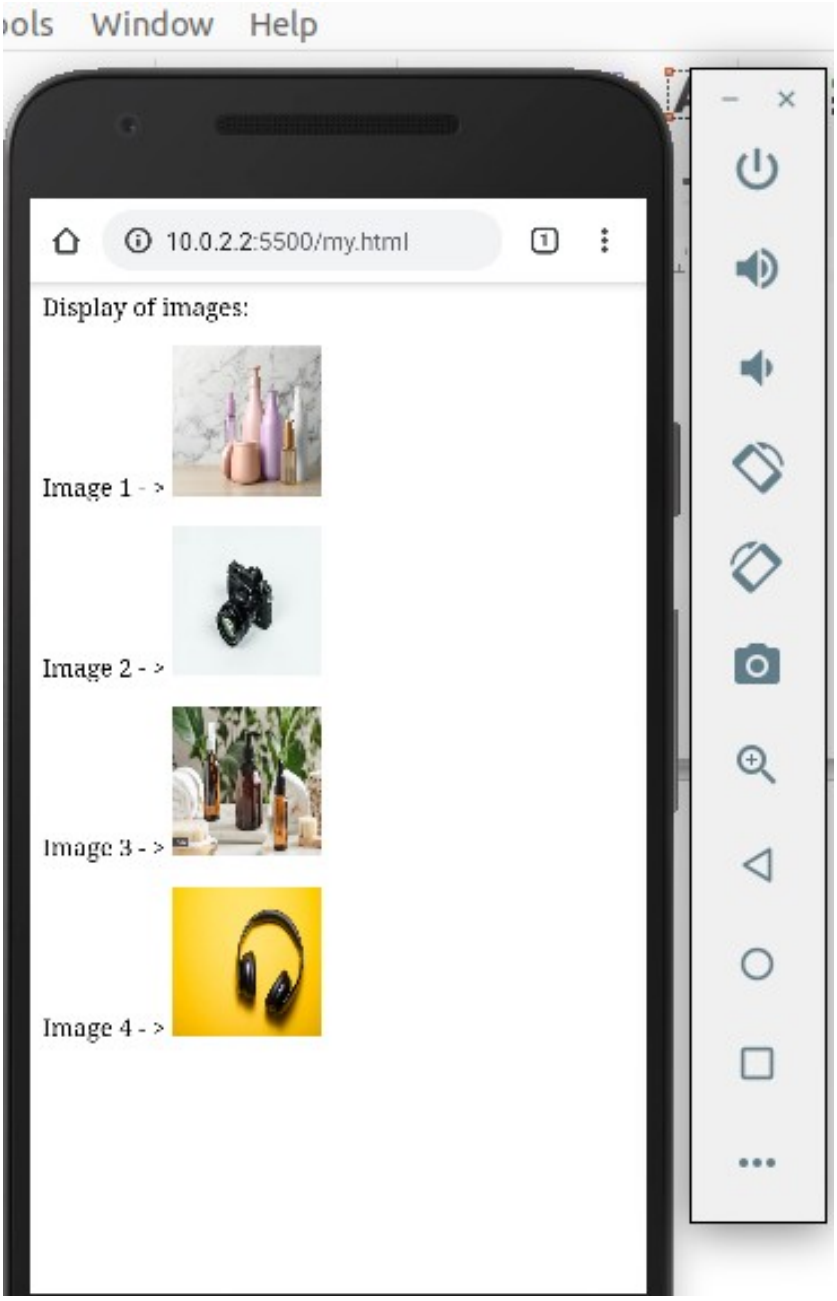
Caches files on chrome browser:



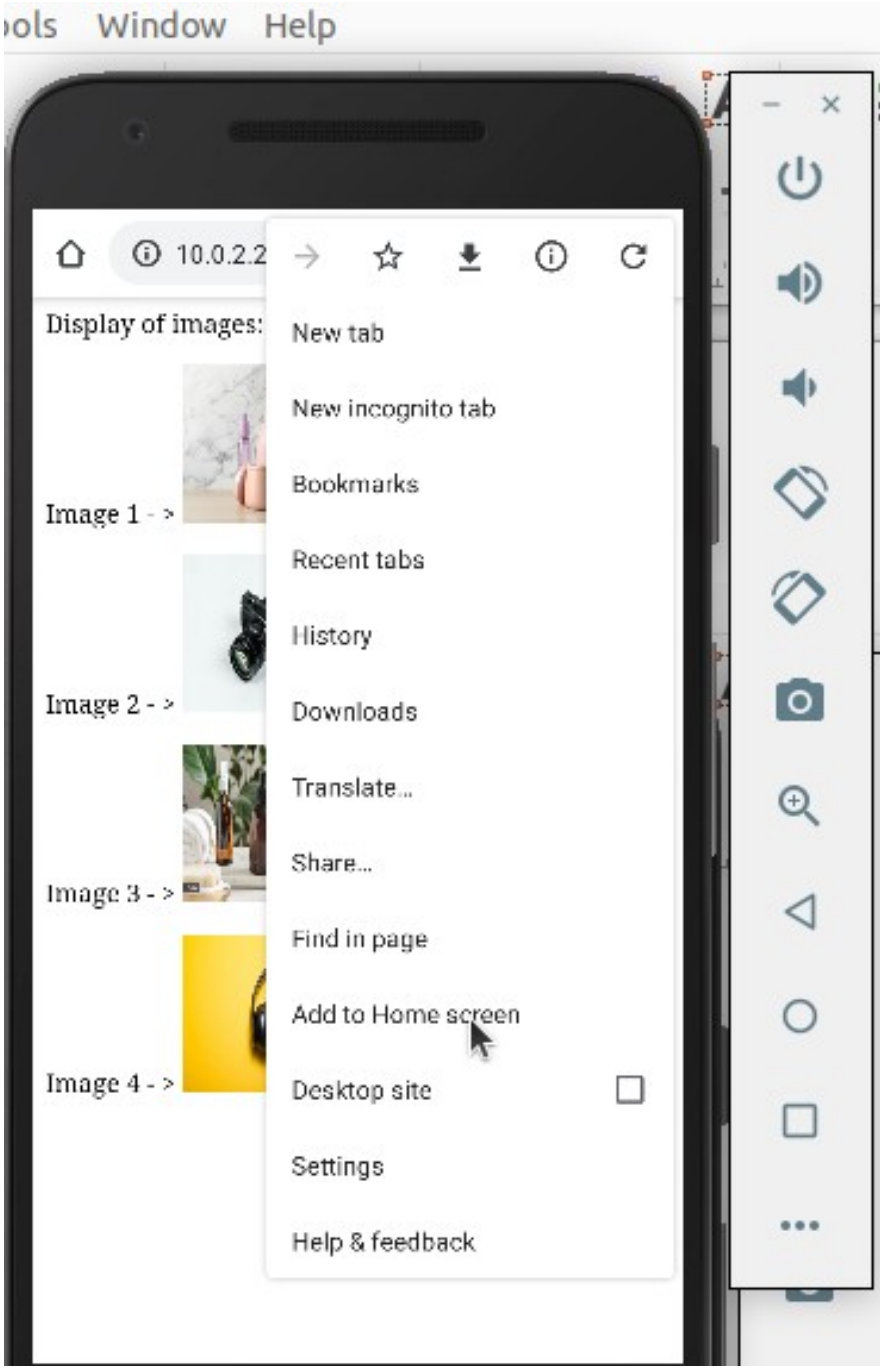

Welcome to Android Studio
Android Studio
Dolphin | 2021.3.1 Patch 1
Projects
Customize
Plugins
Learn Android Studio
Search projects
New Project
Open
Get from VCS
SMS_Application
~/AndroidStudioProjects/SMS_Application
Lab5_DB
~/AndroidStudioProjects/Lab5_DB
Lab4_Activity
~/AndroidStudioProjects/Lab4_Activity
Fragment_Example
~/AndroidStudioProjects/Fragment_Example2
Fragment_Example
~/AndroidStudioProjects/Fragment_Example
Lab3_activity
~/AndroidStudioProjects/Lab3_activity
Simple_Example_New
~/AndroidStudioProjects/Simple_Example_New
Lab2_Button_activity
~/AndroidStudioProjects/Lab2_Button_activity
TestProgram5
~/AndroidStudioProjects/TestProgram5
start.js swProgram8 • js
Profile or Debug APK
Import Project (Gradle, Eclipse ADT, etc.)
Import an Android Code Sample
SDK Manager
Virtual Device Manager


Device Manager
Create device
Device
API
Size on Disk
Actions
Nexus 5X API 30
Android 11.0 Google Play | x86
30
11 GB
Launch this AVD in the emulator

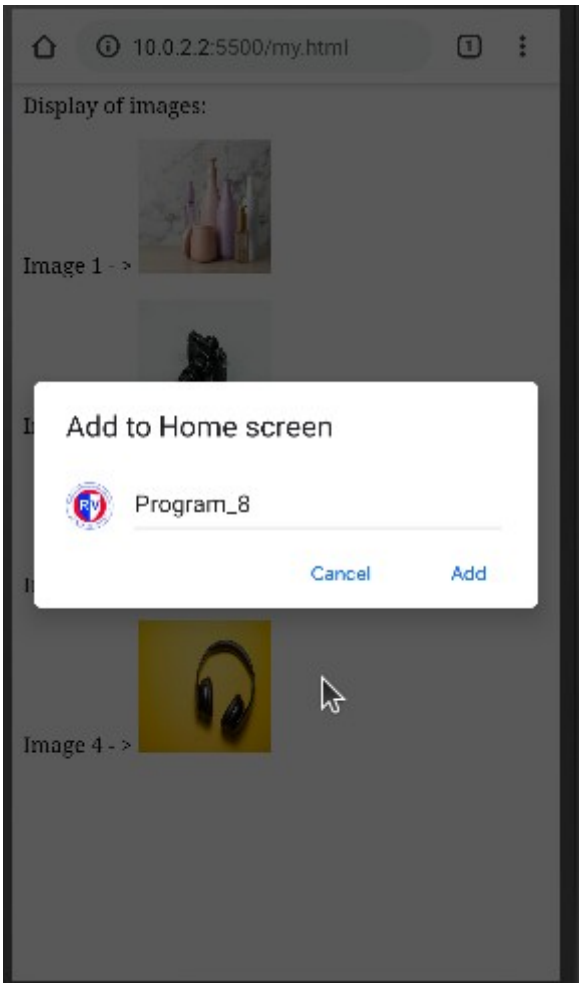
load the page on phone:



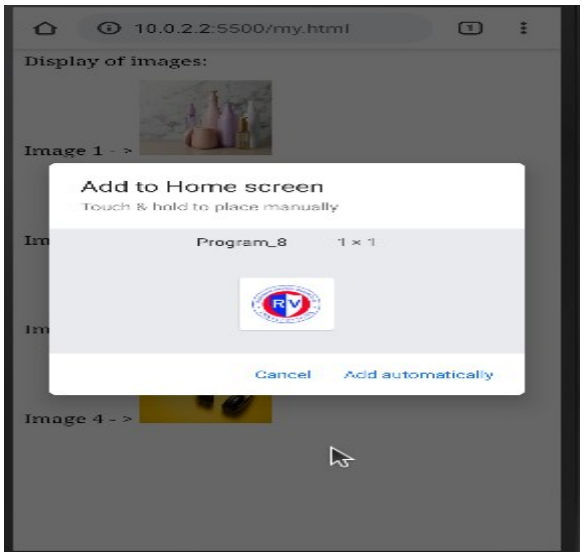
Add to home screen:



Next screen:

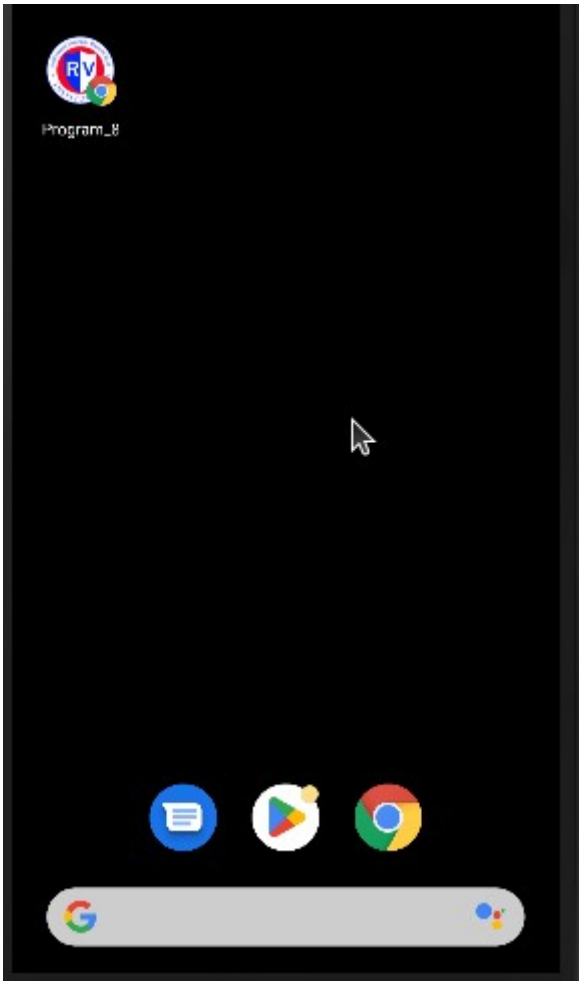


Click on add:



click on add automatically – come out of the browser, there will be icon saved on the screen. Here manifest file icon and short_name has been

added as a icon and name to the app like. So when you click on the app like icon it will lead to app like view for the website without any installation.



Check with the mobile network offline and online for both the images and website to be loaded.