Program-8:Build a simple web page using PWA by adding a service Worker.
1. Check nodejs and npm are there or not in ubuntu.
      • whereis nodejs
      • whereis npm
2. if nodejs and npm are not there in ubuntu first install nodejs and npm.
      • sudo apt install nodejs
      • sudo apt install npm
3. Then install npm in vs code
      • npm install
4. Then start npm
      • npm start
5.create manifest file:-
      • public->right click->new file->manifest.json
6.create sw.js file:-
      • public->right click->new file->sw.js
7.ctrl+shift+i-open developer option

**index.html:-**

```html
<head>
        <link rel="manifest" href="manifest.json">
</head>
<body>
        <script>
                if('serviceWorker' in navigator)
                {
                        navigator.serviceWorker.register('sw.js')
                        .then((reg) => console.log('ServiceWorker is register',reg))
                        .catch((err) => console.log('ServiceWorker is not register',err))
                }
        </script>
</body>
```

**sw.js:-**

```js
        self.addEventListener('install',event=>
        console.log('ServiceWorker is installed',event)
        );

        self.addEventListener('activate',event=>
        console.log('ServiceWorker is Actived',event)
        );

        self.addEventListener('fetch',event=>
        console.log('ServiceWorker is fetch',event)
        );
```

## manifest.json:-

```json
{
    "name": "Login in PWA",
    "short_name": "login",
    "dir": "ltr",
    "display": "fullscreen",
    "orientation": "portrait-primary",
    "scope": ".",
    "start_url": "index.html",
    "id": "index.html",
    "background_color": "#e2e2e2",
    "theme_color": "#e2e2e2",
    "description": "The is Simple Program",
    "icons":
    [
        {
            "src": "/images/icons/icon-72x72.png",
            "type": "image/png",
            "sizes": "72x72"
        },
        {
            "src": "/images/icons/icon-128x128.png",
            "type": "image/png",
            "sizes": "128x128"
        }
    ]
}
```

## output:-

Dimensions: Moto G4 ▾   360   ×   640   75% ▾   ⋮

Elements   Console   Sources   Network   Performance   Memory   Application   Security   »   📕1   ⚙ ⋮ ✕

▶ ⃠ top ▾ 👁   Filter   Default levels ▾   1 Issue: 📕1   1 hidden ⚙

**Login**

Enter User

Enter Pass

Login

ServiceWorker is fetch   sw.js:12
▶ FetchEvent {isTrusted: true, request: Request, clientId: '01acdafb-0d6f-4595-9e0b-0229bbba88c2', resultingClientId: '', isR
eload: false, …}
ServiceWorker is register   (index):54
▶ ServiceWorkerRegistration {installing: null, waiting: null, active: ServiceWorker, navigationPreload: NavigationPreloadMana
ger, scope: 'http://localhost:4567/', …}
ServiceWorker is fetch   sw.js:12
▶ FetchEvent {isTrusted: true, request: Request, clientId: '01acdafb-0d6f-4595-9e0b-0229bbba88c2', resultingClientId: '', isR
eload: false, …}
ServiceWorker is fetch   sw.js:12
▶ FetchEvent {isTrusted: true, request: Request, clientId: '01acdafb-0d6f-4595-9e0b-0229bbba88c2', resultingClientId: '', isR
eload: false, …}
▶ #document   main.js:10
▶ #document   main.js:25
ServiceWorker is fetch   sw.js:12
▶ FetchEvent {isTrusted: true, request: Request, clientId: '01acdafb-0d6f-4595-9e0b-0229bbba88c2', resultingClientId: '', isR
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