Angular start-up pack

Libraries required

1. Angular CLI

Step 1: installing NPM

Go to cmd and path where it is to be installed

→ [npm install -g @angular/cli] // "-g to install it globally" //@angular/cli is the package name

```
PS C:\Users\rkrishna> npm install -g @angular/cli
C:\Users\rkrishna\AppData\Roaming\npm\ng -> C:\Users\rkrishna\AppData\Roaming\npm\node_modules\@angular\cli\bin\ng

> @angular/cli@8.0.3 postinstall C:\Users\rkrishna\AppData\Roaming\npm\node_modules\@angular\cli
> node ./bin/postinstall/script.js
```

→ Add the path in environment variables(everything mentioned in the box is must)
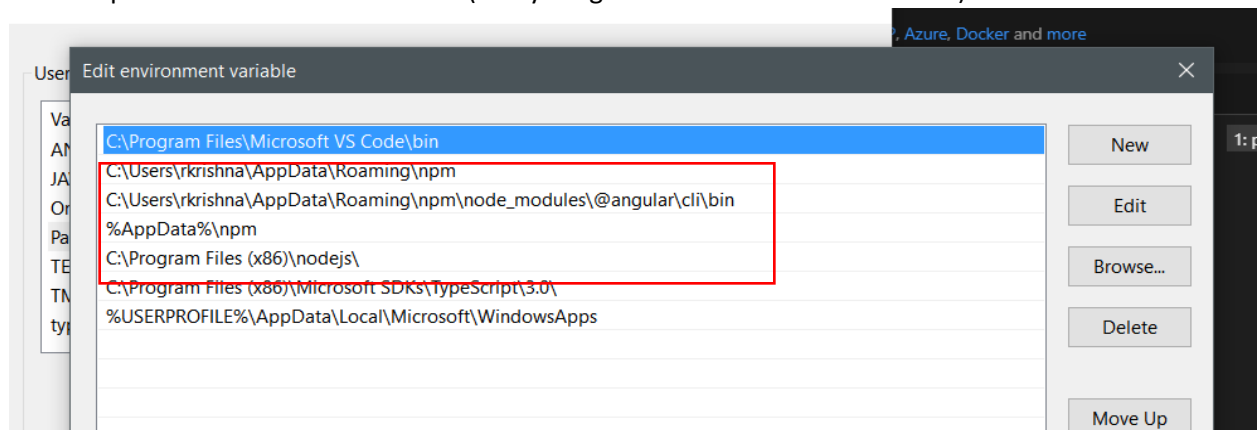
→ verify npm and angular cli version

Step 2: create a new angular project

→ go to the folder where you want to create the project and verify the angular/cli version.

```
PS D:\> mkdir angular_try


    Directory: D:\


Mode                LastWriteTime         Length Name
----                -------------         ------ ----
d-----        6/17/2019  12:14 PM                angular_try


PS D:\> cd .\angular_try\
PS D:\angular_try> ng --version


                    Angular CLI


Angular CLI: 8.0.3
Node: 10.15.3
OS: win32 x64
Angular:
...

Package                     Version
------------------------------------------------------
@angular-devkit/architect    0.800.3
@angular-devkit/core         8.0.3
@angular-devkit/schematics   8.0.3
@schematics/angular          8.0.3
@schematics/update           0.800.3
rxjs                         6.4.0

PS D:\angular_try>
```

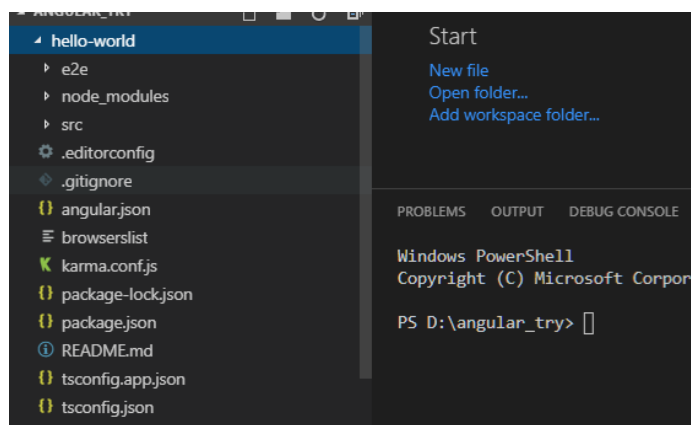➔ [ng new hello-world] //hello-world is project name

```
PS D:\angular_try> ng new hello-world
? Would you like to add Angular routing? No
? Which stylesheet format would you like to use? CSS
CREATE hello-world/angular.json (3465 bytes)
CREATE hello-world/package.json (1284 bytes)
```

New project will be created with multiple files.

➔ Open the project in vs code
Type [code .] → new vs code window opens → if you open the terminal it should be pointing to the folder where your current project is available.

```
PS D:\angular_try> code .
```

```
▲ ANGULAR_TRY
  ▲ hello-world                    Start
    ▷ e2e                          New file
    ▷ node_modules                 Open folder...
    ▷ src                          Add workspace folder...
    ⚙ .editorconfig
    ◇ .gitignore
    {} angular.json                PROBLEMS   OUTPUT   DEBUG CONSOLE
    ≡ browserslist
    K karma.conf.js                Windows PowerShell
    {} package-lock.json           Copyright (C) Microsoft Corpora
    {} package.json
    ⓘ README.md                    PS D:\angular_try> []
    {} tsconfig.app.json
    {} tsconfig.json
```

Step 3: run the project and verify if everything is working fine

➔ Go to terminal ➔ go to your project folder and type [ng serve] , it should compile and run your project.

```
PS D:\angular_try> cd .\hello-world\
PS D:\angular_try\hello-world> ng serve

Date: 2019-06-17T07:00:05.892Z
Hash: e88d44f55ae999fd13b6
Time: 22386ms
chunk {main} main.js, main.js.map (main) 9.75 kB [initial] [rendered]
chunk {polyfills} polyfills.js, polyfills.js.map (polyfills) 248 kB [initial] [rendered]
chunk {runtime} runtime.js, runtime.js.map (runtime) 6.08 kB [entry] [rendered]
chunk {styles} styles.js, styles.js.map (styles) 16.3 kB [initial] [rendered]
chunk {vendor} vendor.js, vendor.js.map (vendor) 3.67 MB [initial] [rendered]
** Angular Live Development Server is listening on localhost:4200, open your browser on http://localhost:4200/
**
i ⌐wdm⌐: Compiled successfully.
```

➔ Open browser and go to the localhost , you should see your project up and running.
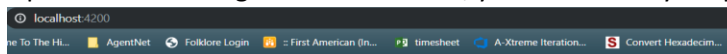
Welcome to hello-world!

Step 4: installing TypeScript globally

➔ Go to your root user folder where u added angular package and type
[npm install -g typescript]

```
PS D:\angular_try\hello-world> c:
PS C:\> cd .\Users\rkrishna\
PS C:\Users\rkrishna> npm install -g typescript
C:\Users\rkrishna\AppData\Roaming\npm\tsc -> C:\Users\rkrishna\AppData\Roaming\npm\node_modules\typescript\bin\tsc
C:\Users\rkrishna\AppData\Roaming\npm\tsserver -> C:\Users\rkrishna\AppData\Roaming\npm\node_modules\typescript\bin\tsserver
+ typescript@3.5.2
updated 1 package in 5.596s
```
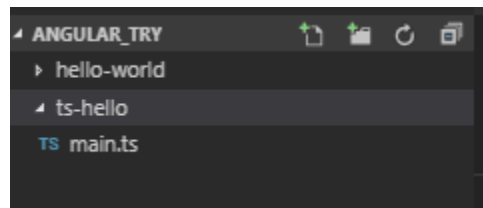
This will install typescript globally.

➔ Verify the typescript [tsc --version]

```
PS C:\Users\rkrishna> tsc --version
Version 3.5.2
```

(optional)➔ to try out demo with typescript you can create a new folder and open .ts file in VS Code.. go back to your project folder and create a new folder
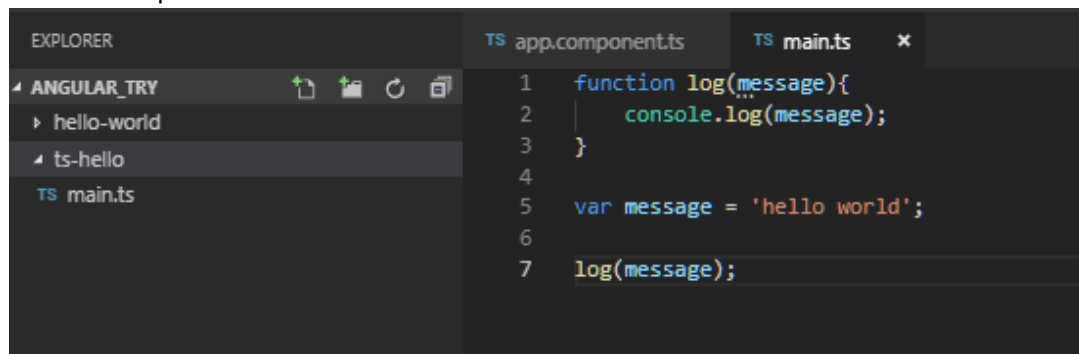
```
PS C:\Users\rkrishna> d:
PS D:\angular_try\hello-world> cd..
PS D:\angular_try> mkdir ts-hello
```

```
PS D:\angular_try> cd .\ts-hello\
PS D:\angular_try\ts-hello> code main.ts
PS D:\angular_try\ts-hello> []
```

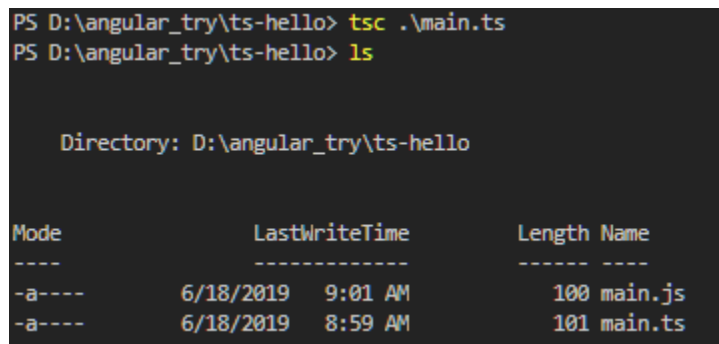→It should open the new folder and file in the VS code.

➔ Create a simple function in .ts file


```
1    function log(message){
2        console.log(message);
3    }
4
5    var message = 'hello world';
6
7    log(message);
```

➔ Compile the script [tsc main.ts] //tsc mean typescriptcompiler


```
PS D:\angular_try\ts-hello> tsc .\main.ts
PS D:\angular_try\ts-hello> ls


    Directory: D:\angular_try\ts-hello


Mode                 LastWriteTime         Length Name
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-a----         6/18/2019     9:01 AM          100 main.js
-a----         6/18/2019     8:59 AM          101 main.ts
```

➔ On successful compilation we can see two file main.ts and main.Js.
➔ Bu default when u call ng serve the compiler internally calls typescriptcompiler and transpires all .ts file to .js
➔ Now if u open the main.js


```
PS D:\angular_try\ts-hello> code main.js
```

```
1    function log(message) {
2        console.log(message);
3    }
4    var message = 'hello world';
5    log(message);
6
```
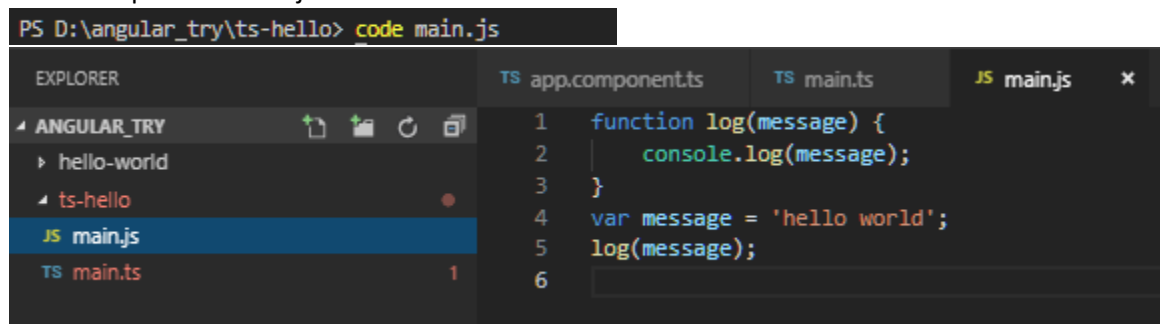
➔ Now execute the script to check if your code is working
   [node main.js]

```
PS D:\angular_try\ts-hello> node main.js
hello world
```

You can see the output in the console.