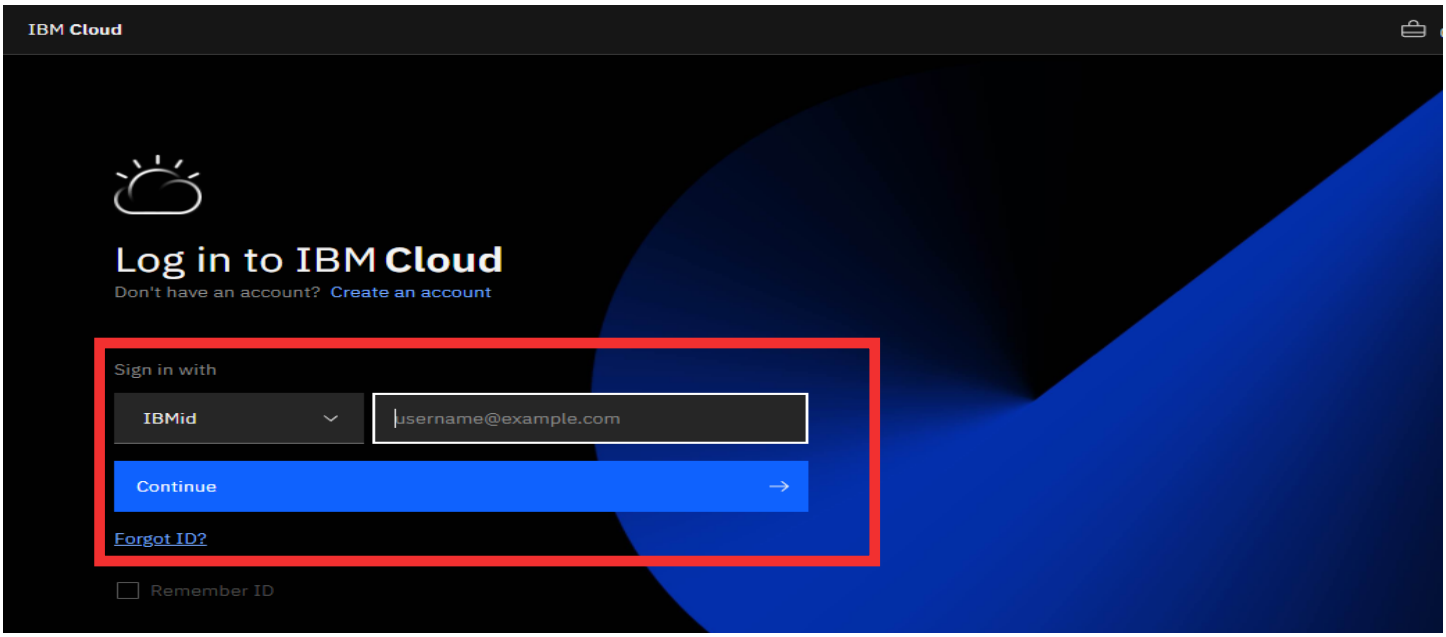
## EXERCISE – 8

## DEVOPS IN IBM CLOUD

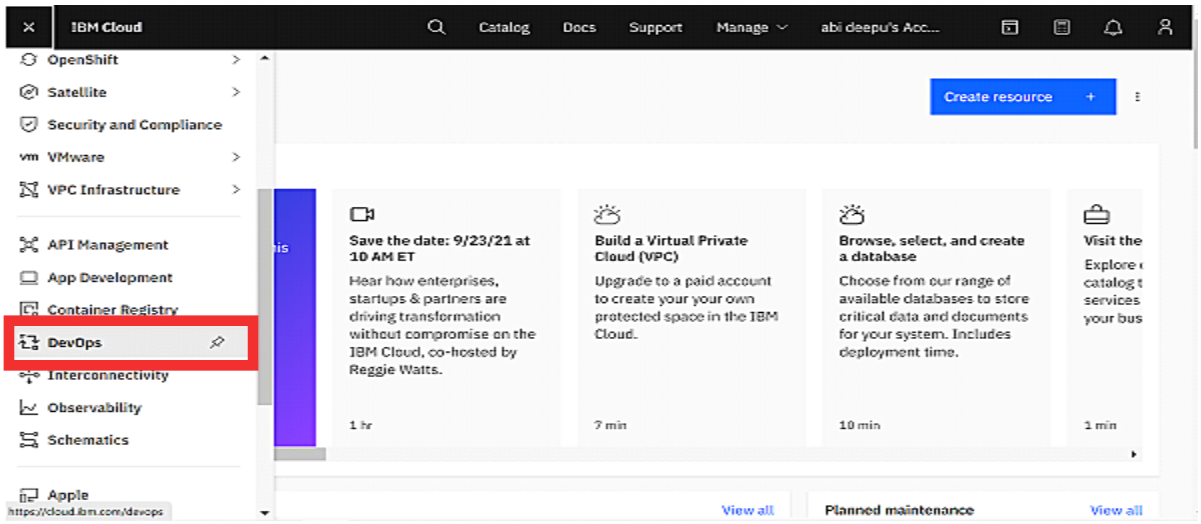
### STEP – 1:

**Login to IBM cloud account.**



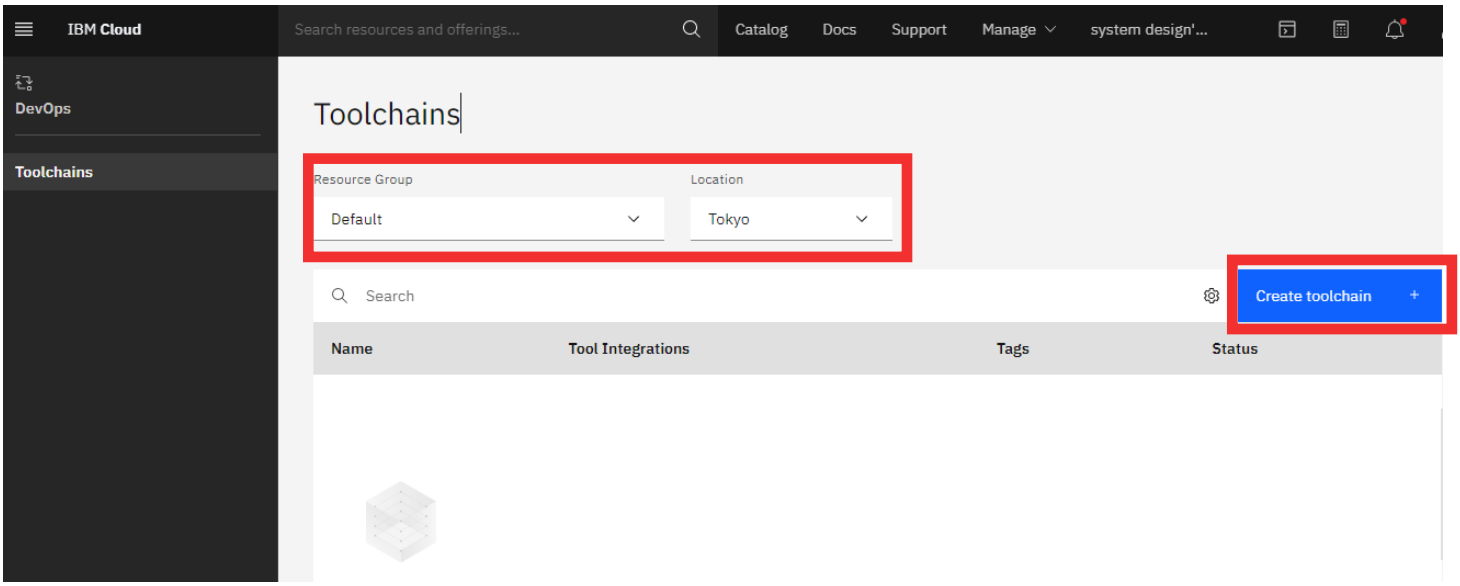

### STEP – 2:

**Open the left Navigation bar and go to DevOps category**



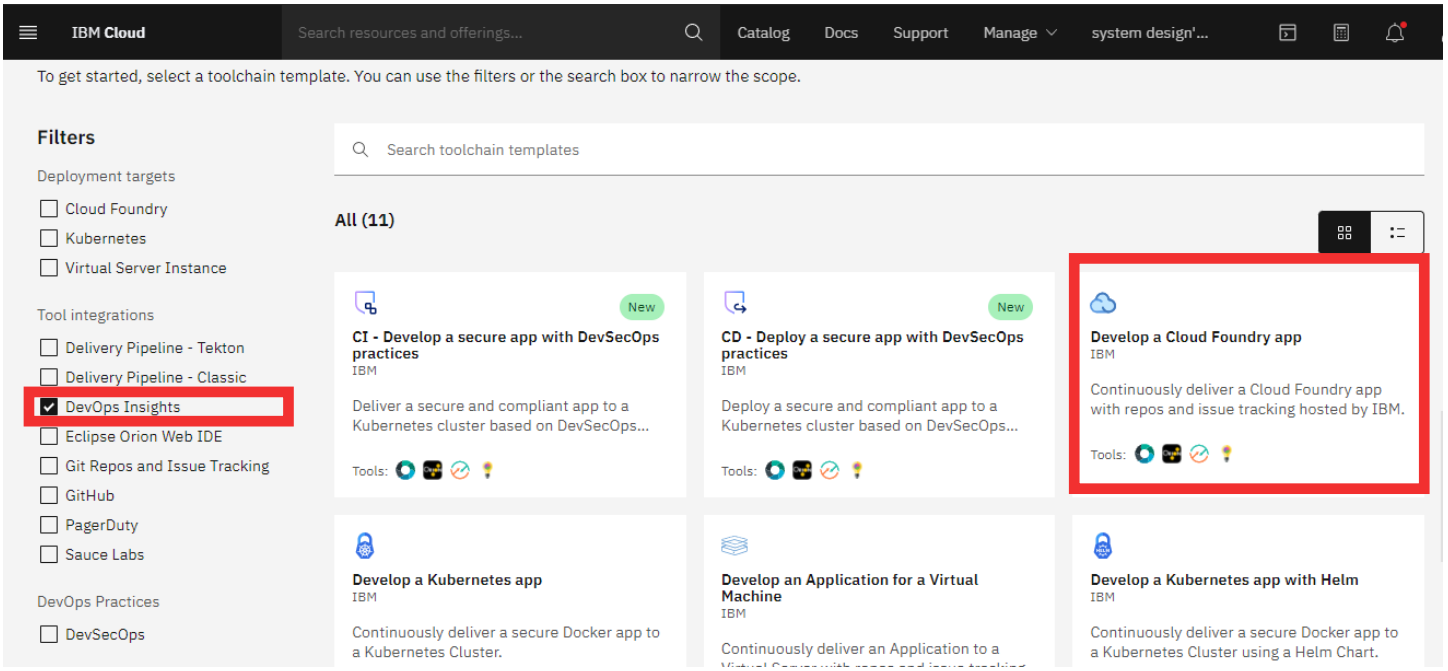
## STEP – 3:

**Ensure the LOCATION is “Tokyo” and click on Create Toolchain Button**



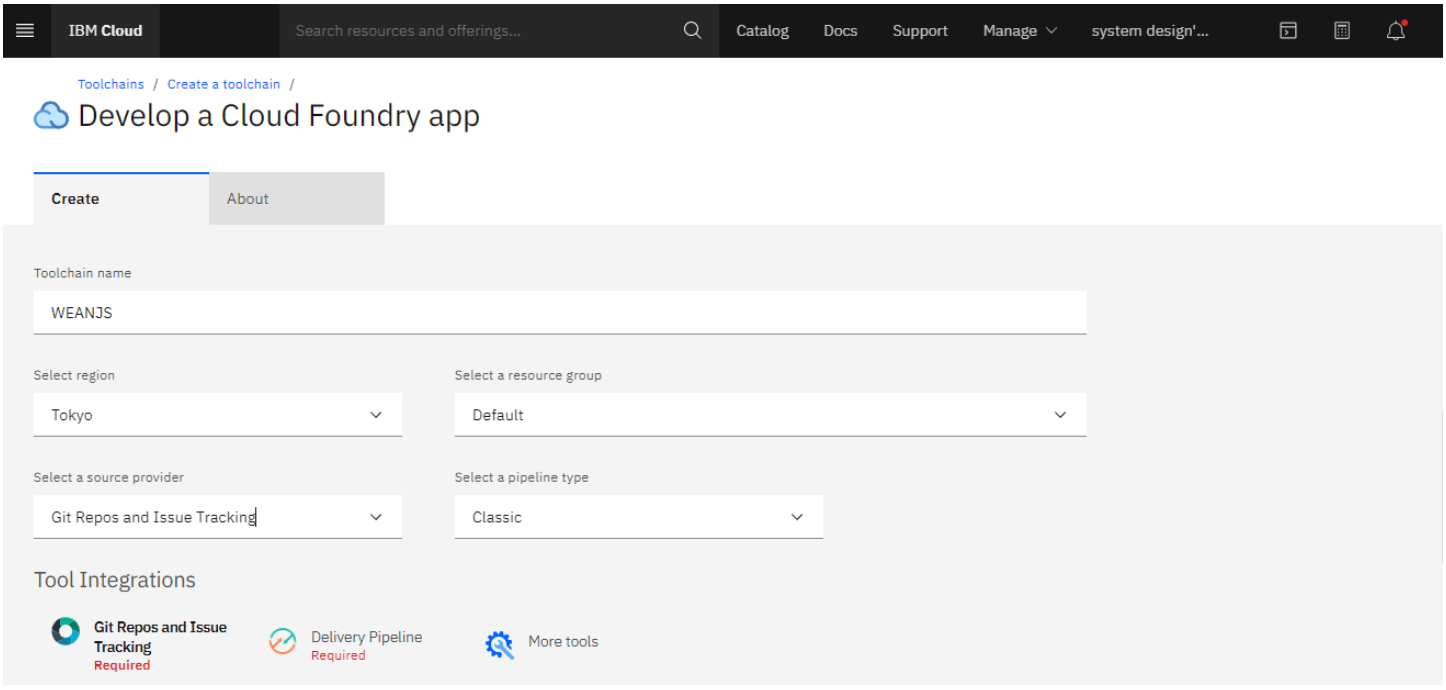

## STEP – 4:

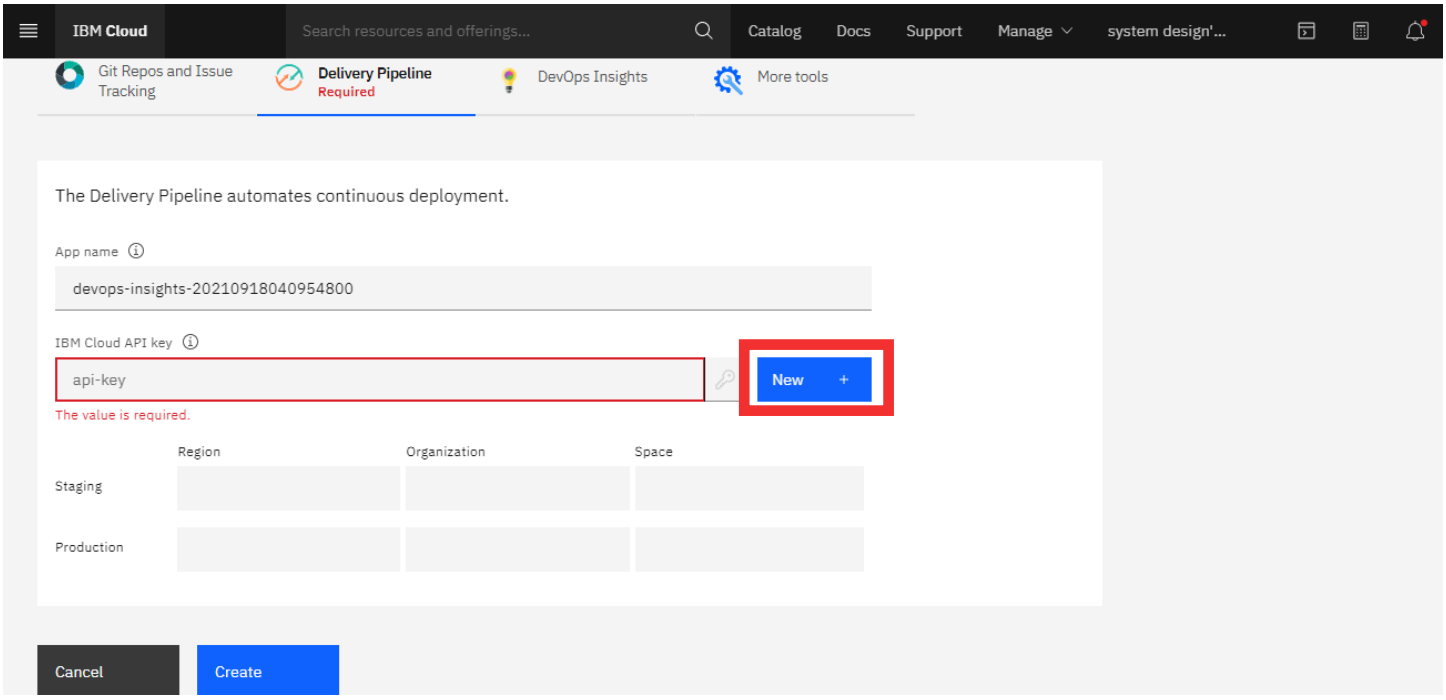
**Click on Develop a Cloud Foundry app with DevOps insights option.**

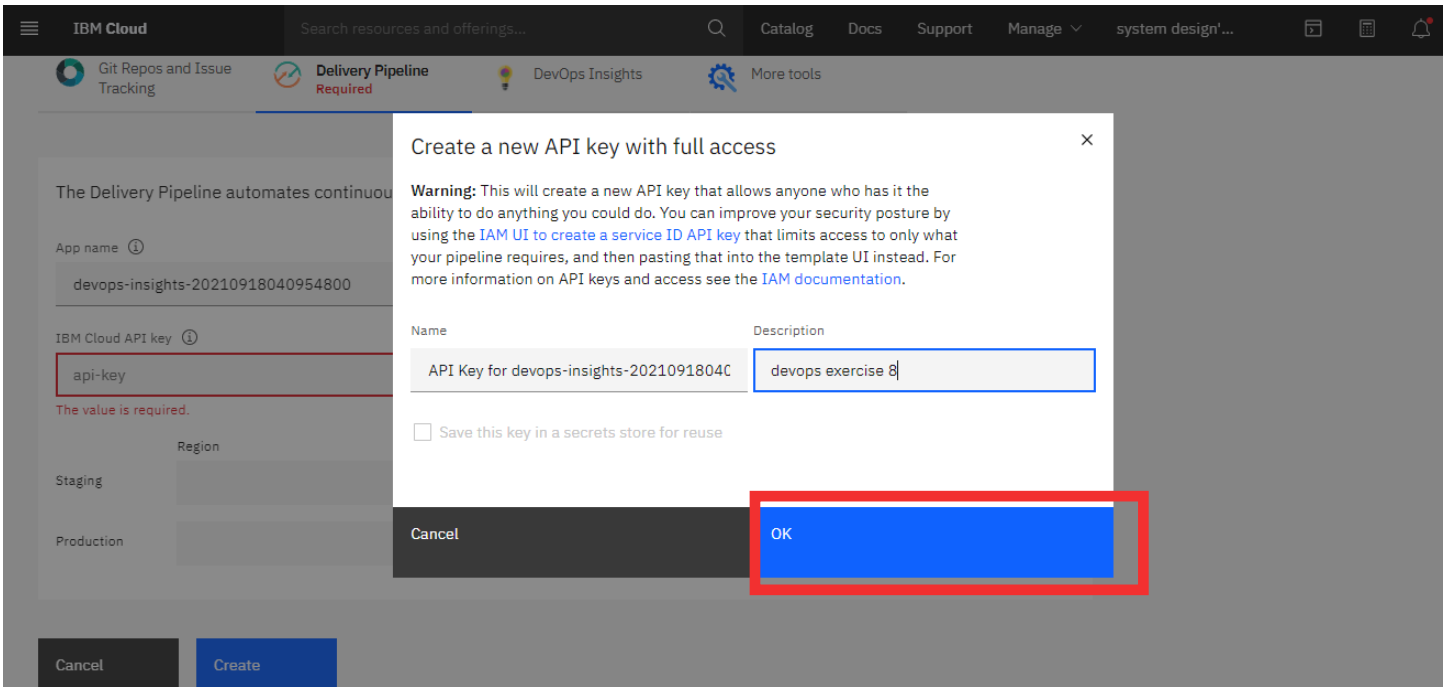


## STEP – 5:

**Page will open to you to configure the default options.**



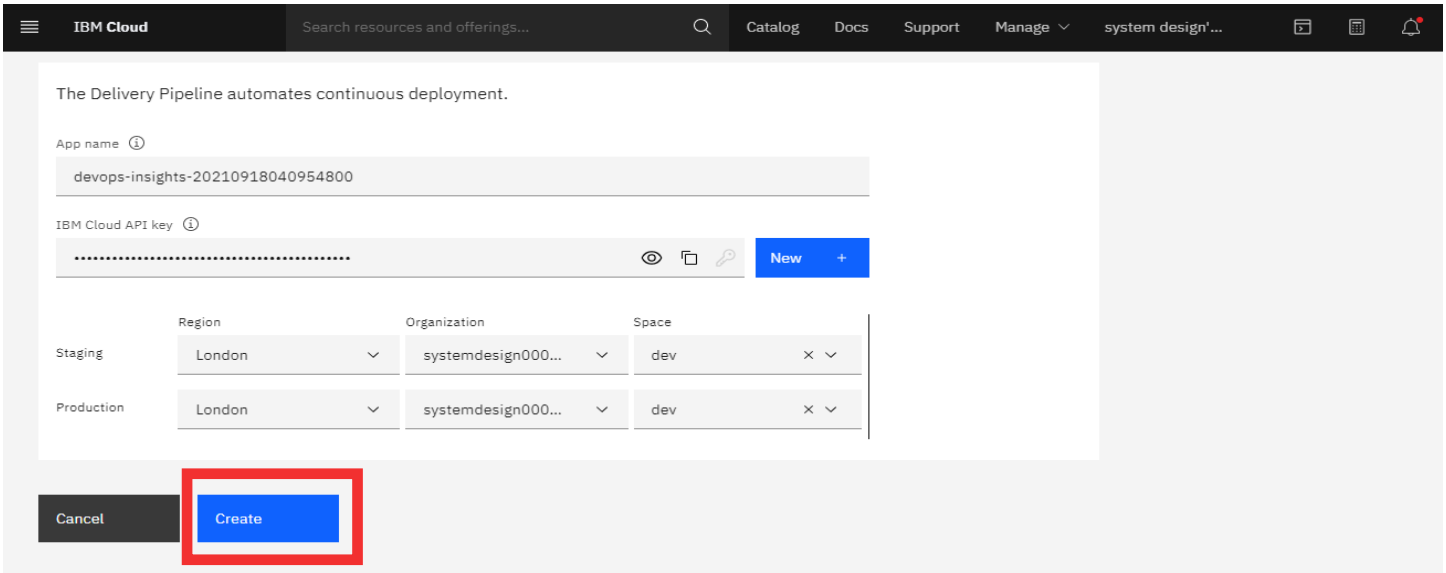






## STEP – 6:

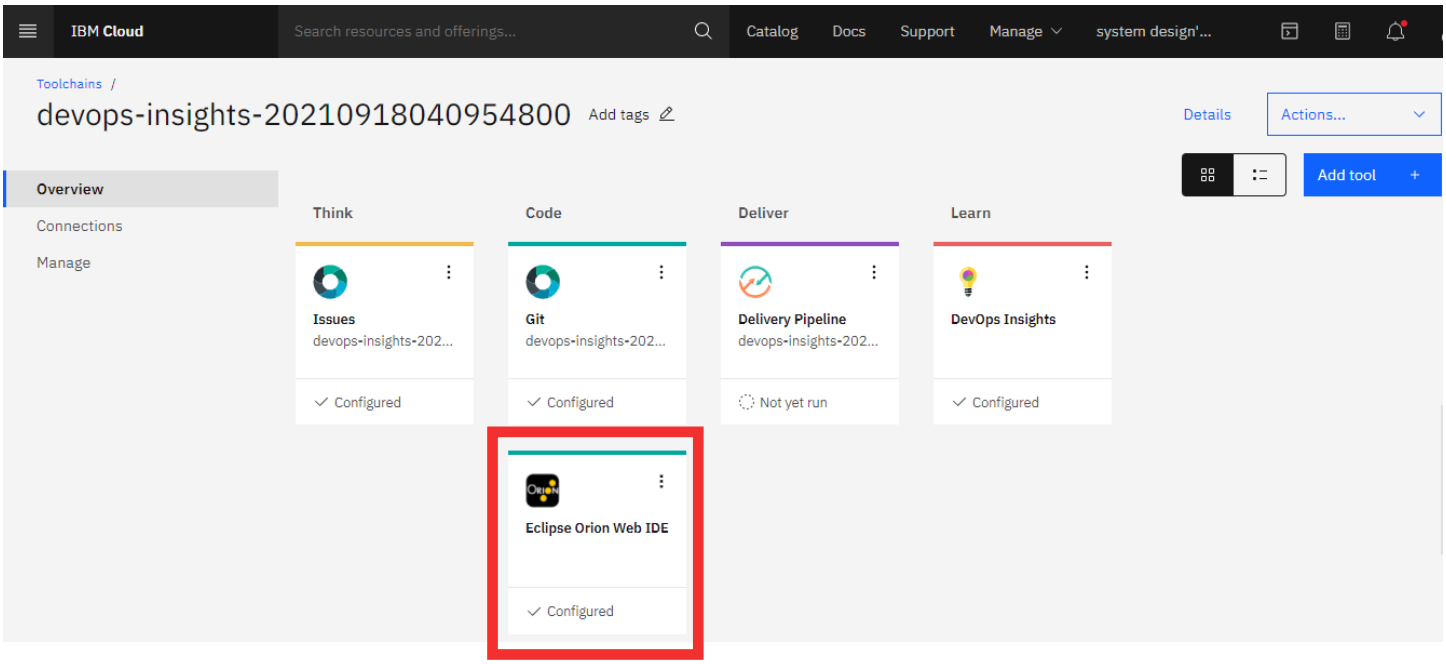
**In the pipeline option you will need to create an API key.**

**After creating the API key will be automatically assigned to you in the place and select London as your Staging stage and Production stage.**



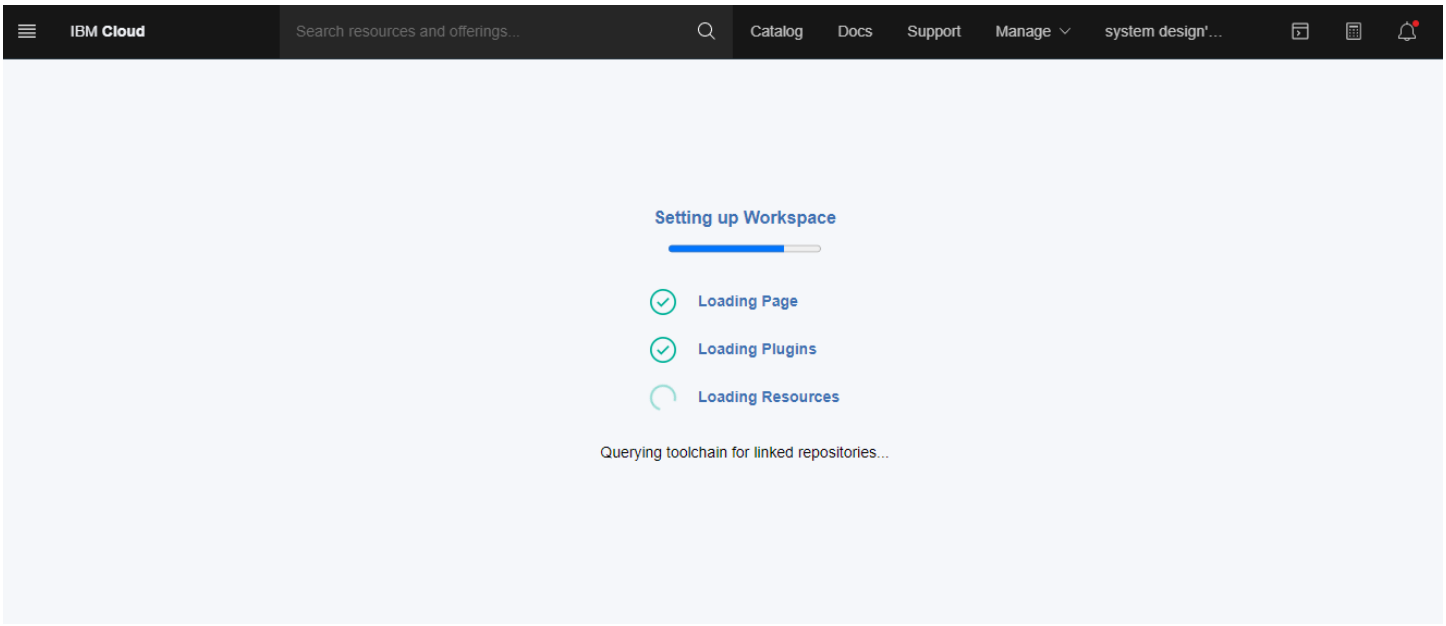
## STEP – 7:

**The configuration is completed now. Click on Eclipse Orion Web IDE.**




## STEP – 8:

**After click on Eclipse Orion Web IDE it will automatically set up workspace.**



**STEP – 9:**

**This will show up files which are set default in the initial configuration time.**

**Create Three files "Index.html" , "Style.css" and "Script.js"**

**After creating a files, Paste the below code to respective files as Show in below Images.**

**Index.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">
  <meta name="Description" content="My Weather App">
   <title>Weather App</title>
   <link rel="stylesheet" href="style.css">
   <script src="https://kit.fontawesome.com/6392c1211e.js" crossorigin="anonymous"></script>
   <link rel="preconnect" href="https://fonts.googleapis.com">
   <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
   <link href="https://fonts.googleapis.com/css2?family=Roboto:wght@400;700;900&display=swap"
rel="stylesheet">
   <script src="script.js" defer></script>
</head>
<body>
   <div class="Search">
      <input type="text" class="Searchbar" placeholder="Search">
      <button><i class="fas fa-search-location"></i></button>
   </div>
   <div class="Card Loading">
      <div class="Card-1">
         <div class="part1">
            <h2 class="Day">Tuesday</h2>
            <div class="Date">15 Jan 2019</div>
            <div class="Location">
               <i class="fas fa-map-marker-alt"></i>
               <span class="City">Paris, FR</span>
```

```
            </div>
        </div>
        <div class="part2">
            <img src="https://openweathermap.org/img/wn/04n.png" alt="" class="icon" height="90px"
width="90px" />
            <h1 class="Temp">25°C</h1>
            <div class="Description">Sunny</div>
        </div>
    </div>
<div class="Card-2">
        <table cellpadding="4">
            <tr>
                <td>PRECIPITATION</td>
                <td>0 %</td>
            </tr>
            <tr>
                <td>HUMIDITY</td>
                <td>34 %</td>
            </tr>
            <tr>
                <td>WIND</td>
                <td>0 km/h</td>
            </tr>
        </table>
 <div class="Weekdays">
            <div class="Days One">
                <img src="https://openweathermap.org/img/wn/04n.png" alt="" class="icon" />
                <p id="d1">Tue</p>
                <p id="t1">29°C</p>
            </div>
            <div class="Days Two">
                <img src="https://openweathermap.org/img/wn/04n.png" alt="" class="icon" />
                <p id="d2">Wed</p>
                <p id="t2">21°C</p>
            </div>
            <div class="Days Three">
                <img src="https://openweathermap.org/img/wn/04n.png" alt="" class="icon" />
                <p id="d3">Thur</p>
                <p id="t3">8°C</p>
```

```
            </div>
            <div class="Days Four">
               <img src="https://openweathermap.org/img/wn/04n.png" alt="" class="icon" />
               <p id="d4">Fri</p>
               <p id="t4">19°C</p>
            </div>
         </div>
      </div>
   </div>
</body>
</html>
```

**Style.css:**

```
html {
   font-family: 'Roboto', sans-serif;
   color: white;
   font-size: 20px;
   width: 100%;
   height: 100%;
}
.Search {
   display: flex;
   justify-content: center;
   align-items: center;
   margin: 12px auto;
}
button {
   margin: 0.3rem;
   width: 1.7rem;
   height: 1.7rem;
   border-radius: 50%;
   background: #3b3d54;
   color: white;
   border: none;
   outline: none;
   transition: background 0.1s ease-in-out;
}
.Searchbar:hover {
```

```
    box-shadow: 2px 2px 5px rgba(0,0,0,0.7);
}
button:hover {
    background: #4c4f69;
    cursor: pointer;
    box-shadow: 2px 2px 5px rgba(0,0,0,0.7);
}
input {
    border: none;
    outline: none;
    padding: 0.2rem 1rem;
    border-radius: 15px;
    background: #3b3d54;
    color: white;
    font-family: inherit;
    font-size: 105%;
}
.Card {
    display: flex;
    margin: 12px 20rem;
    width: auto;
    height: auto;
}
.Card-1 {
    display: flex;
    flex-direction: column;
    justify-content: space-between;
    border-radius: 25px;
    width: 24rem;
    height: 26rem;
    flex-grow: 1;
    padding: 0.5rem;
    position: relative;
    box-shadow: 3px 3px 20px rgba(0,0,0,0.7);
    text-shadow: #000 1px 0 25px;
    transition: transform 500ms ease;
}
.Card-1::after {
    content: "";
```

```
    border-radius: 25px;
    background: var(--background);
    background-position: center;
    background-repeat: no-repeat;
    filter: brightness(90%);
    opacity: 0.92;
    top: 0;
    left: 0;
    bottom: 0;
    right: 0;
    position: absolute;
    z-index: -1;
}
.Card-2 {
    border-radius: 25px;
    width: 24rem;
    height: 26rem;
    flex-grow: 1;
    padding: 0.5rem;
    transition: width 0.2s, height 0.2s;
    display: flex;
    flex-direction: column;
    justify-content: space-between;
    position: relative;
    box-shadow: 3px 3px 20px rgba(0,0,0,0.7);
    transition: transform 500ms ease;
}
.Card-2::after {
    content:"";
    border-radius: 25px;
    background-color: #252836;
    opacity: 0.92;
    top: 0;
    left: 0;
    bottom: 0;
    right: 0;
    position: absolute;
    z-index: -1;
}
```

```
.Card-1:hover, .Card-2:hover {
    transform: scale(1.05);
}
.Day {
    margin-bottom: 0px;
    padding-bottom: 0px;
    font-size: 2rem;
    margin-left: 15px;
}
.Date {
    margin-top: none;
    padding-top: none;
    margin-left: 15px;
}
.Location {
    margin-top: 15px;
    margin-left: 5px;
    font-size: 22px;
}

.Card-1 i, .icon {
    margin-left: 15px;
    margin-bottom: 0px;
}

.Temp {
    margin-left: 15px;
    margin-top: 0px;
    padding-top: 0px;
    margin-bottom: 0px;
    font-size: 4rem;
}

.Description {
    font-size: 1.4rem;
    font-weight: bold;
    margin-left: 20px;
    margin-bottom: 10px;
}
```

```
table {
    margin: 1.2rem;
    margin-top: 2rem;
    margin-bottom: 2rem;
}

tr td:nth-child(1) {
    font-weight: bold;
    text-align: left;
}

tr td:nth-child(2) {
    text-align: right;
    width: 90%;
}
.Weekdays {
    display: flex;
    flex-direction: row;
    justify-content: space-evenly;
    border-radius: 1rem;
    background-color: #303445;
    width: auto;
    height: auto;
    margin: auto;
}
.Days {
    padding: 0.2rem;
    border-radius: 1rem;
    padding-top: 1rem;
    flex-direction: column;
    text-align: center;
    background-color: #303445;
    transition: background-color 300ms ease;
}
.Days:hover {
    background-color: whitesmoke;
    color: #303445;
    border-radius: 1rem;
    cursor: pointer;
```

```
}
.Days:hover img {
    filter: invert(1);
}
.Card.Loading {
    visibility: hidden;
    max-height: 20px;
    position: relative;
}
.Card.Loading::after {
    visibility: visible;
    content: "Loading...";
    color: white;
    position: absolute;
    top: 0;
}
```

**Script.js:**

```
let D = null;
let weather = {
    "apiKey": "dea886ab571fa9ba5defd3fe2cb73358",
    fetchWeather: function(city) {
        fetch("https://api.openweathermap.org/data/2.5/forecast?q="
        + city
        + "&units=metric&appid="
        + this.apiKey
        )
            .then((response) => response.json())
            .then((data) => {D = data; this.displayWeather(data, 1);});
    },
    displayWeather: function(data, DayNumber) {
        const cityname = data.city.name;
        const country = data.city.country;
        // DAY 1
        let date1 = data.list[0].dt_txt;
        const icon1 = data.list[0].weather[0].icon;
        const description1 = data.list[0].weather[0].description;
        const temp1 = data.list[0].main.temp;
```

```
    const humidity1 = data.list[0].main.humidity;
    const speed1 = Math.round((Number(data.list[0].wind.speed) * 3.6) * 100) / 100;
    const pop1 = data.list[0].pop;
    const main1 = data.list[0].weather[0].main;
    // DAY 2
    let date2 = data.list[7].dt_txt;
    const icon2 = data.list[7].weather[0].icon;
    const description2 = data.list[7].weather[0].description;
    const temp2 = data.list[7].main.temp;
    const humidity2 = data.list[7].main.humidity;
    const speed2 = Math.round((Number(data.list[7].wind.speed) * 3.6) * 100) / 100;
    const pop2 = data.list[7].pop;
    const main2 = data.list[7].weather[0].main;
    // DAY 3
    let date3 = data.list[15].dt_txt;
    const icon3 = data.list[15].weather[0].icon;
    const description3 = data.list[15].weather[0].description;
    const temp3 = data.list[15].main.temp;
    const humidity3 = data.list[15].main.humidity;
    const speed3 = Math.round((Number(data.list[15].wind.speed) * 3.6) * 100) / 100;
    const pop3 = data.list[15].pop;
    const main3 = data.list[15].weather[0].main;
    // DAY 4
    let date4 = data.list[23].dt_txt;
    const icon4 = data.list[23].weather[0].icon;
    const description4 = data.list[23].weather[0].description;
    const temp4 = data.list[23].main.temp;
    const humidity4 = data.list[23].main.humidity;
    const speed4 = Math.round((Number(data.list[23].wind.speed) * 3.6) * 100) / 100;
    const pop4 = data.list[23].pop;
    const main4 = data.list[23].weather[0].main;

    let months   = ['', 'January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September',
'October', 'November', 'December'];

    function dateList(date) {
      let myarr1 = date.split(" ");
      date = myarr1[0];
      let myArr2 = date.split("-");
```

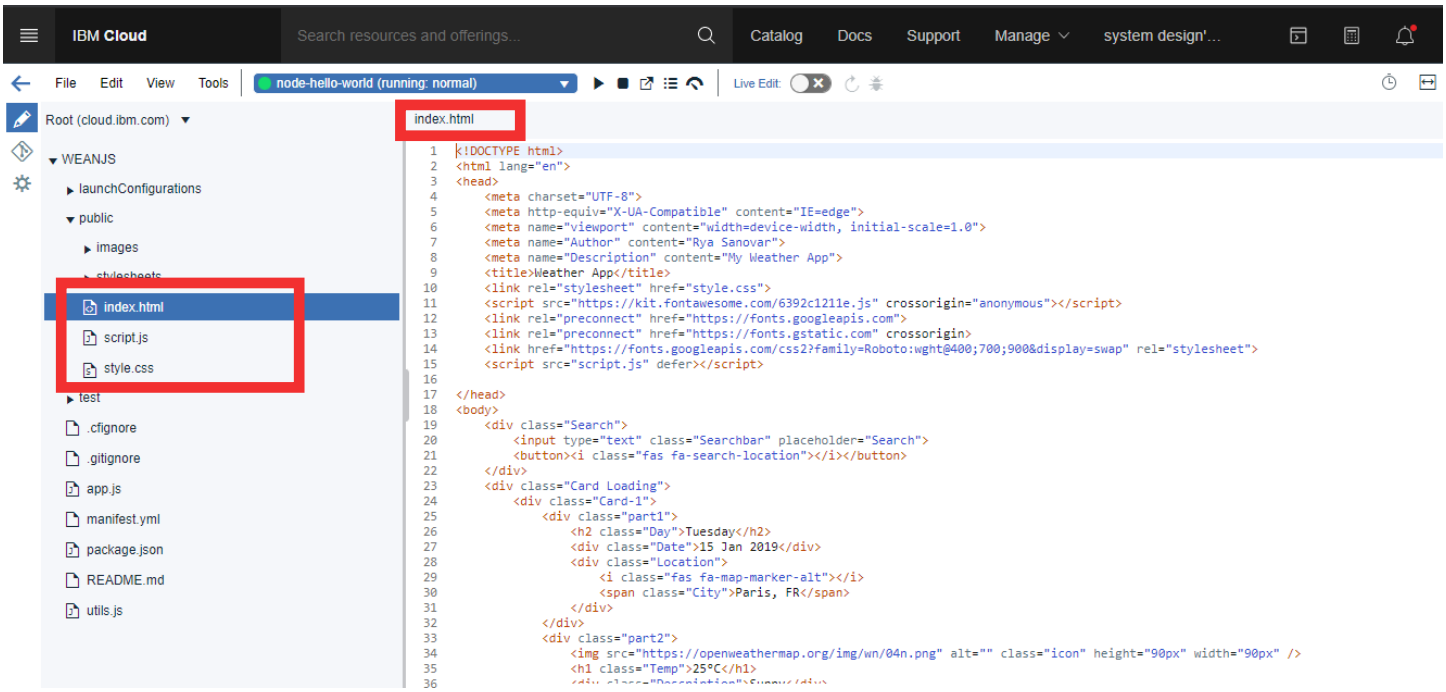
```
        let year = myArr2[0]
        let month = months[Number(myArr2[1])];
        let d = myArr2[2];
        return [d, month, year];
    }

    let arr1 = dateList(date1);
    let d = new Date(`${arr1[0]} ${arr1[1]}, ${arr1[2]}`);

    let arr2 = dateList(date2);
    let dx = new Date(`${arr2[0]} ${arr2[1]}, ${arr2[2]}`);

    let arr3 = dateList(date3);
    let dy = new Date(`${arr3[0]} ${arr3[1]}, ${arr3[2]}`);

    let arr4 = dateList(date4);
    let dz = new Date(`${arr4[0]} ${arr4[1]}, ${arr4[2]}`);

    let weekday = ['Sunday', 'Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday'];
    let day1 = weekday[d.getDay()];
    let day2 = weekday[dx.getDay()];
    let day3 = weekday[dy.getDay()];
    let day4 = weekday[dz.getDay()];

    function modify(day, arr, icon, temp, desc, pop, humidity, speed) {
        document.querySelector(".Day").innerText = day;
        document.querySelector(".Date").innerText = `${arr[0]} ${arr[1]} ${arr[2]}`;
        document.querySelector(".Card-1 .part2 img").src = "https://openweathermap.org/img/wn/" +
icon + ".png";
        document.querySelector(".Temp").innerText = Math.round(Number(temp)) + "°C";
        document.querySelector(".Description").innerText = desc;
        document.querySelector("table tr:nth-child(1) td:nth-child(2)").innerText = pop + " %";
        document.querySelector("table tr:nth-child(2) td:nth-child(2)").innerText = humidity + " %";
        document.querySelector("table tr:nth-child(3) td:nth-child(2)").innerText = speed + " km/h";
    }

    function CardBackground(main) {

        let style = document.querySelector('.Card-1').style;
```

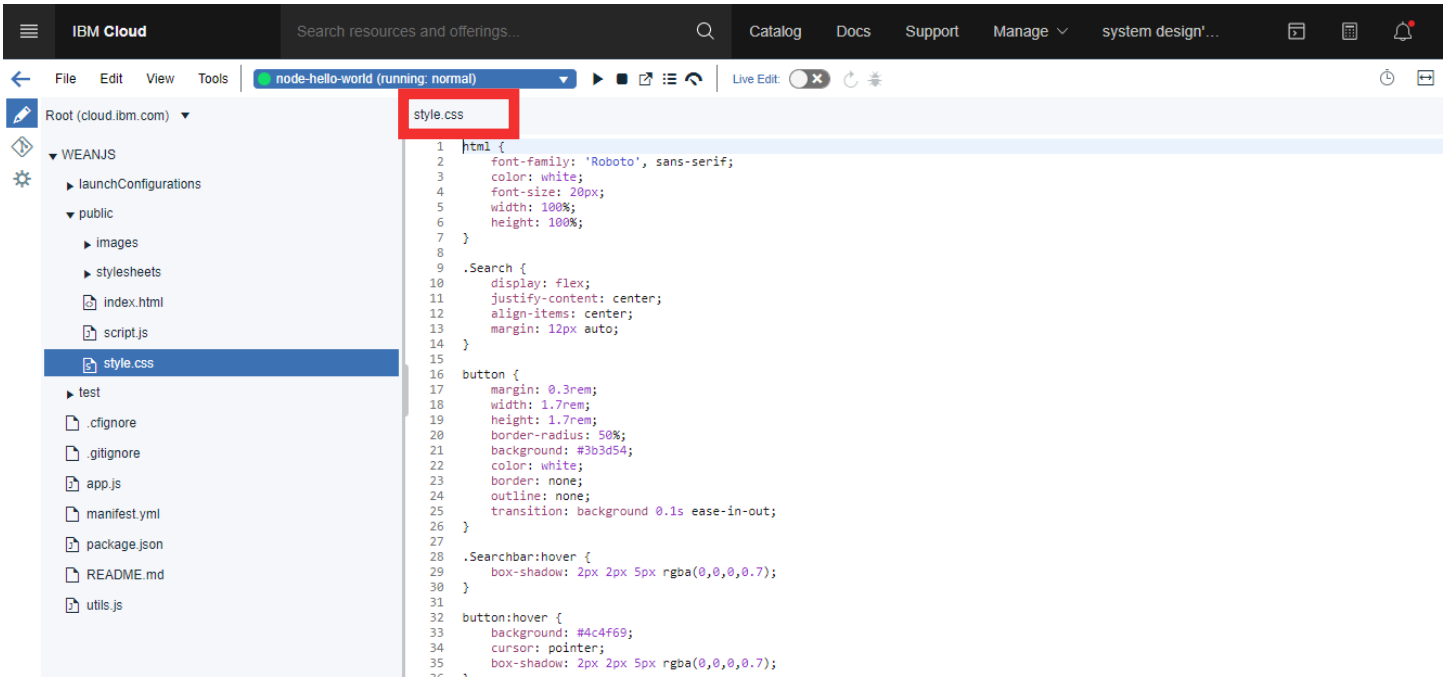
```
        if (main == 'Rain') {
            style.setProperty('--background', "url('https://source.unsplash.com/1600x900/?Rain')");
          } else if (main == 'Clouds') {
            style.setProperty('--background', "url('https://source.unsplash.com/1600x900/?Clouds')");
          } else if (main == 'Clear') {
            style.setProperty('--background', "url('https://source.unsplash.com/1600x900/?Sun')");
          } else {
            style.setProperty('--background', "url('https://source.unsplash.com/1600x900/?" + main +"')");
        }
    }

    switch(DayNumber) {
        case 1:
            modify(day1, arr1, icon1, temp1, description1, pop1, humidity1, speed1);
            CardBackground(main1);
            break;
        case 2:
            modify(day2, arr2, icon2, temp2, description2, pop2, humidity2, speed2);
            CardBackground(main2);
            break;
        case 3:
            modify(day3, arr3, icon3, temp3, description3, pop3, humidity3, speed3);
            CardBackground(main3);
            break;
        case 4:
            modify(day4, arr4, icon4, temp4, description4, pop4, humidity4, speed4);
            CardBackground(main4);
            break;

    }

    // modifications common to all 4 days
    document.querySelector(".City").innerText = cityname + ", " + country;
    document.querySelector(".One img").src = "https://openweathermap.org/img/wn/" + icon1 +
".png";
    document.querySelector("#d1").innerText = day1.substr(0, 3);
    document.querySelector("#t1").innerText = Math.round(Number(temp1)) + "°C";

    document.querySelector(".Two img").src = "https://openweathermap.org/img/wn/" + icon2 +
```

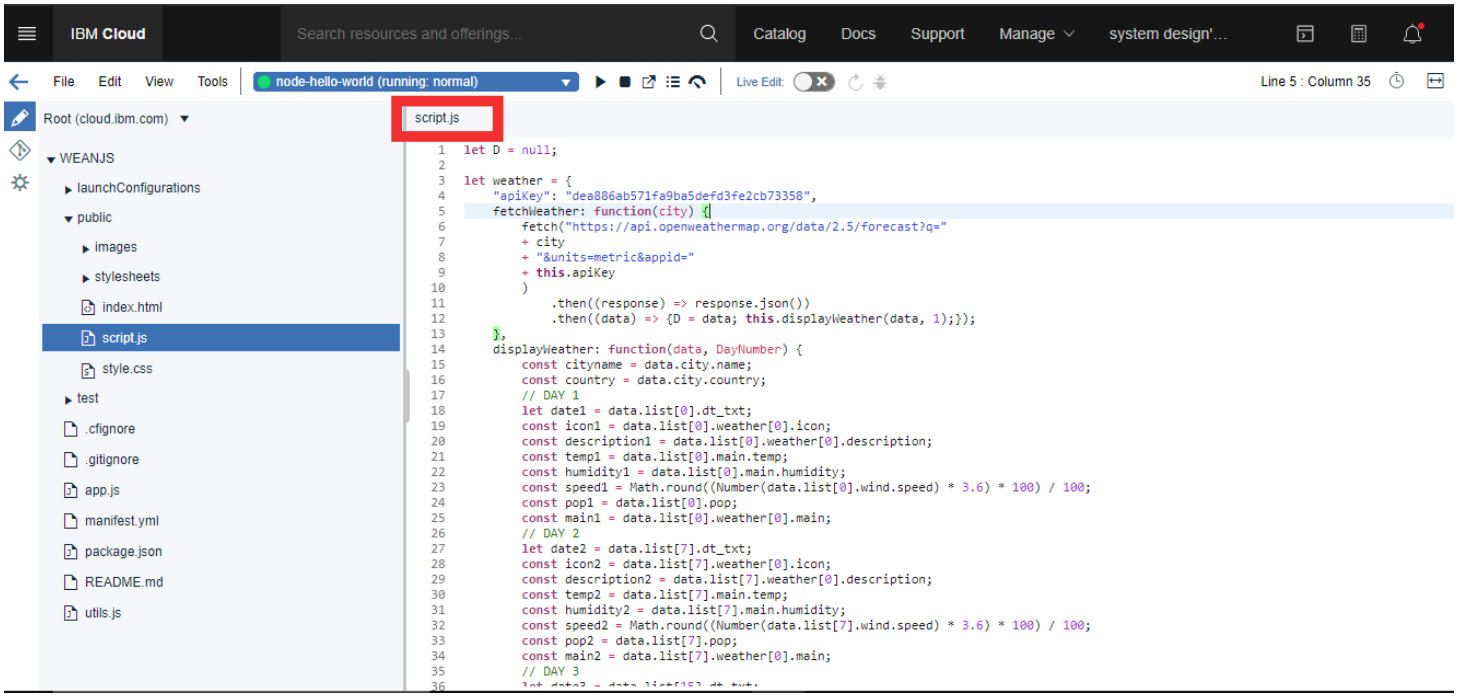
```
".png";
      document.querySelector("#d2").innerText = day2.substr(0, 3);
      document.querySelector("#t2").innerText = Math.round(Number(temp2)) + "°C";

      document.querySelector(".Three img").src = "https://openweathermap.org/img/wn/" + icon3 +
".png";
      document.querySelector("#d3").innerText = day3.substr(0, 3);
      document.querySelector("#t3").innerText = Math.round(Number(temp3)) + "°C";

      document.querySelector(".Four img").src = "https://openweathermap.org/img/wn/" + icon4 +
".png";
      document.querySelector("#d4").innerText = day4.substr(0, 3);
      document.querySelector("#t4").innerText = Math.round(Number(temp4)) + "°C";

      document.querySelector(".Card").classList.remove("Loading");
      document.body.style.backgroundImage = "url('https://source.unsplash.com/1600x900/?" +
cityname +"')"
   },

   search: function() {
      this.fetchWeather(document.querySelector(".Searchbar").value);
   },

};

document.querySelector(".Search button").addEventListener("click", function() { weather.search(); });
document.querySelector(".Searchbar").addEventListener("keyup", function(event) {
   if (event.key == "Enter") {
      weather.search();
   }
});

document.querySelector(".One").addEventListener("click", function() { weather.displayWeather(D , 1)
});
document.querySelector(".Two").addEventListener("click", function() { weather.displayWeather(D , 2)
});
document.querySelector(".Three").addEventListener("click", function() { weather.displayWeather(D , 3)
});
document.querySelector(".Four").addEventListener("click", function() { weather.displayWeather(D , 4)
```

});

weather.fetchWeather("delhi");

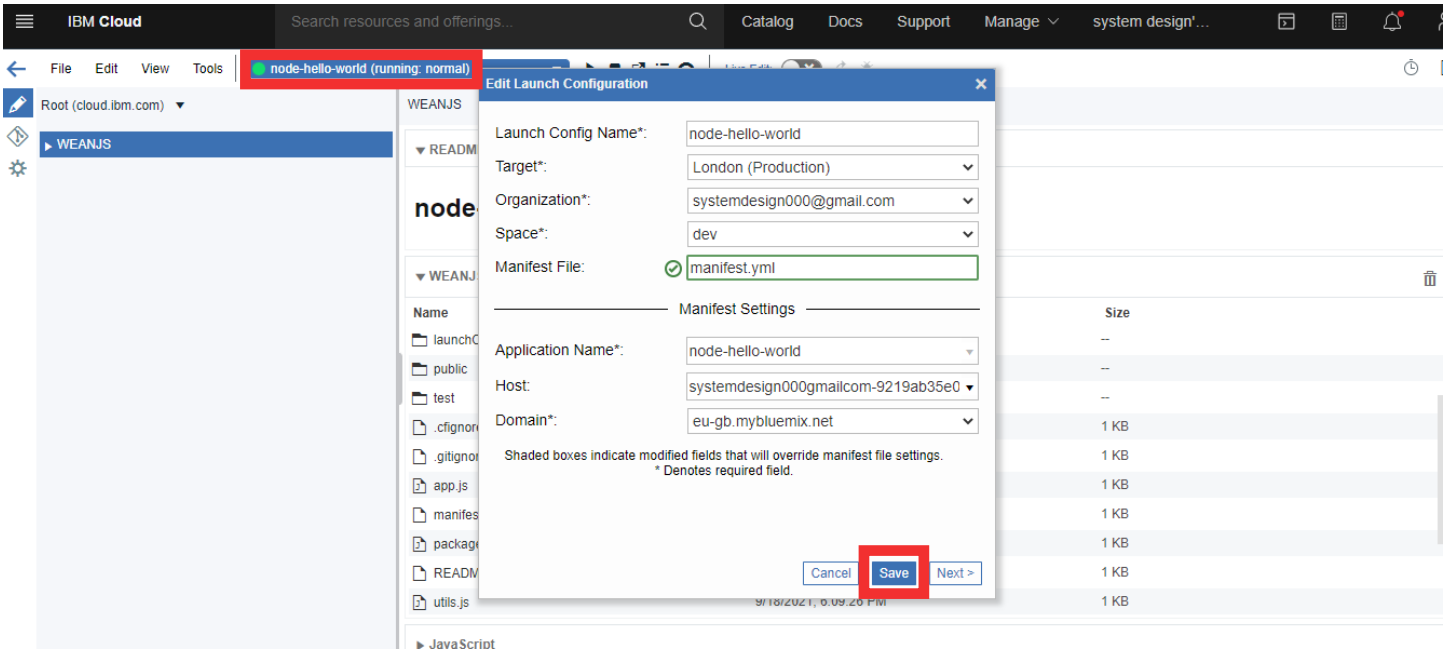





## STEP – 10:

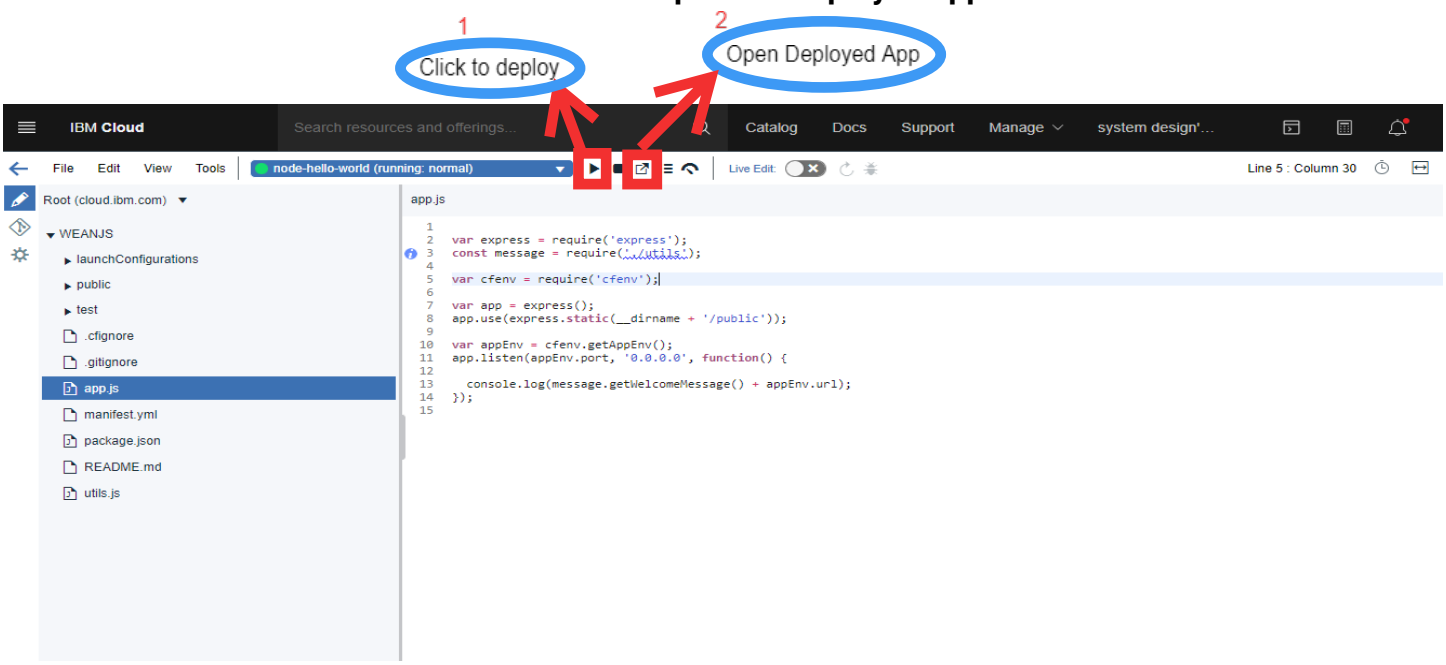
**Edit the launch configuration as shown.**




## STEP – 11:

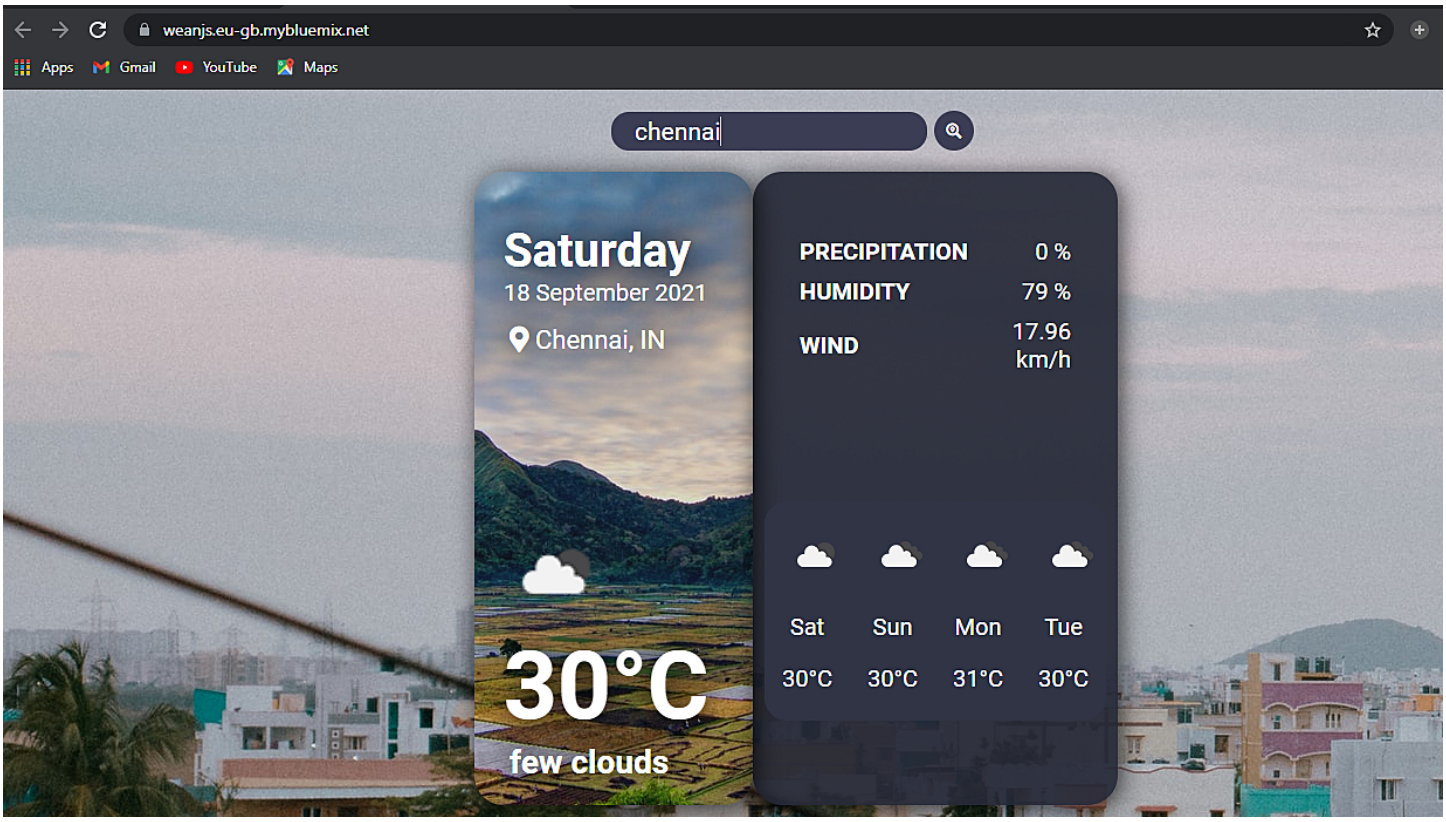
**Click on save and click deploy the app from the workspace to IBM cloud**

**Once the editor is reloaded click on Open the Deployed app.**




## STEP – 12:

**This will open the app in a new window and display the output.**


weanjs.eu-gb.mybluemix.net
Apps
Gmail
YouTube
Maps
chennai
Saturday
18 September 2021
Chennai, IN
30°C
few clouds
PRECIPITATION 0 %
HUMIDITY 79 %
WIND 17.96 km/h
Sat Sun Mon Tue
30°C 30°C 31°C 30°C


weanjs.eu-gb.mybluemix.net
Apps
Gmail
YouTube
Maps
tenkasi
Saturday
18 September 2021
Tenkasi, IN
27°C
light rain
PRECIPITATION 0.3 %
HUMIDITY 84 %
WIND 8.96 km/h
Sat Sun Mon Tue
27°C 30°C 29°C 28°C