Models in ASP.NET Core MVC

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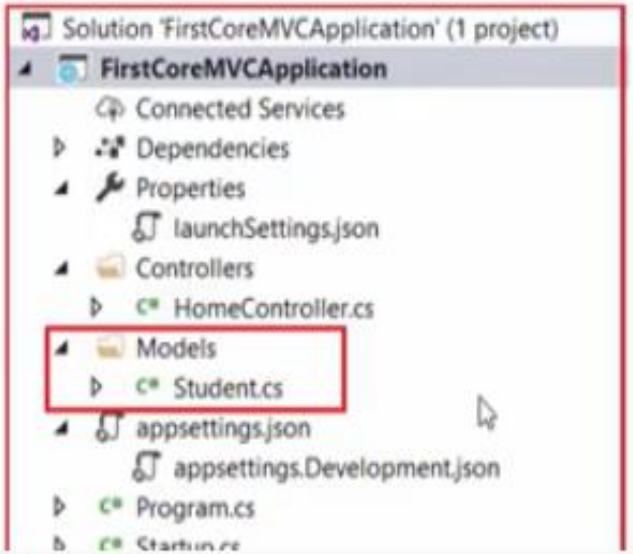
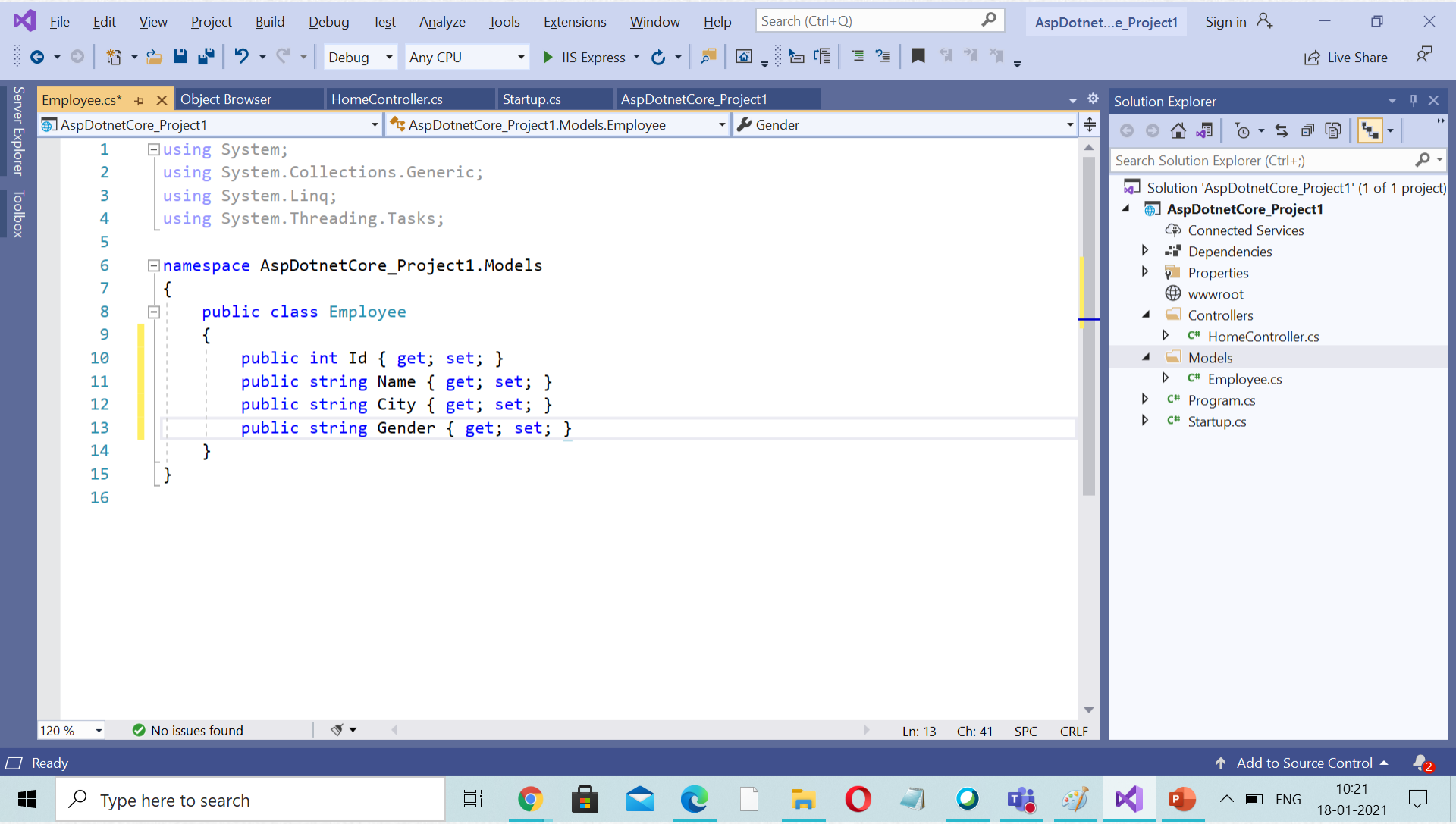
What is Model?

- Model in ASP.NET Core MVC contains a set of classes which are used to represent the domain data as well as it also contains logic to manage the domain data.
- So in the simple word we can say that the model in MVC is used to manage the data i.e. the state of the application in memory.
- It is not mandatory, but it is a good programming practice to store all model classes within the Models folder.

Adding Models folder:

- Right-click on your project, then select **add => new folder** option which will add a new folder. Then rename the folder name as **Models**. Here we want to create a model for displaying the student detail. So, create a class file with the name **Student.cs** within the Models folder. Once you create the Student model then the folder structure of your application should looks as shown below.




File Edit View Project Build Debug Test Analyze Tools Extensions Window Help
Search (Ctrl+Q)
AspDotnet...e_Project1
Sign in
Debug
Any CPU
IIS Express
Live Share
Employee.cs*
Object Browser
HomeController.cs
Startup.cs
AspDotnetCore_Project1
AspDotnetCore_Project1
AspDotnetCore_Project1.Models.Employee
Gender
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5
6 namespace AspDotnetCore_Project1.Models
7 {
8 public class Employee
9 {
10 public int Id { get; set; }
11 public string Name { get; set; }
12 public string City { get; set; }
13 public string Gender { get; set; }
14 }
15 }
16
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'AspDotnetCore_Project1' (1 of 1 project)
AspDotnetCore_Project1
Connected Services
Dependencies
Properties
wwwroot
Controllers
HomeController.cs
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Employee.cs
Program.cs
Startup.cs
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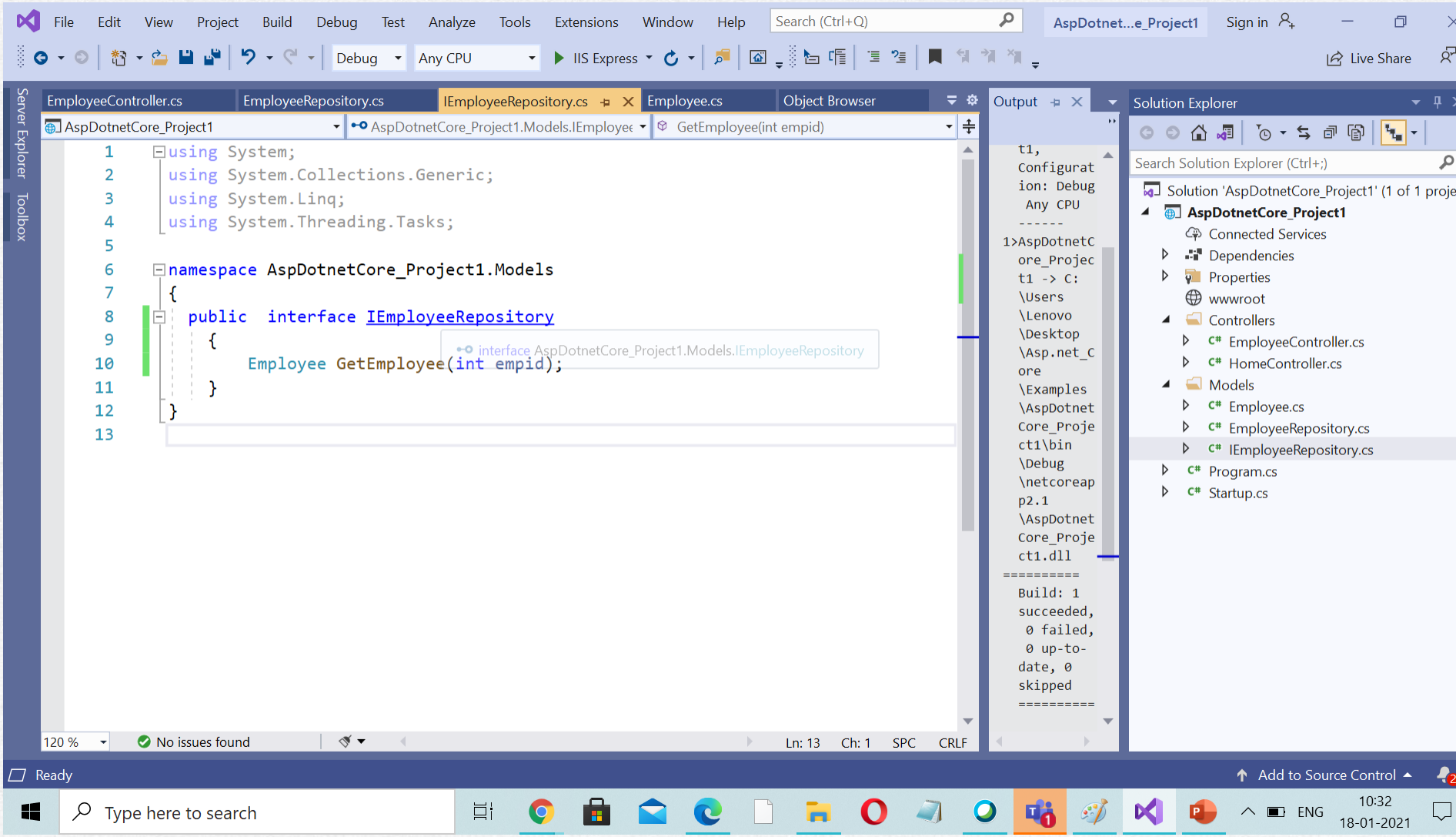
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EmployeeController.cs
EmployeeRepository.cs
IEmployeeRepository.cs
Employee.cs
Object Browser
AspDotnetCore_Project1
AspDotnetCore_Project1.Models.IEmployee
GetEmployee(int empid)
using System;
using System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;
namespace AspDotnetCore_Project1.Models
{
public interface IEmployeeRepository
{
Employee GetEmployee(int empid);
}
}
interface AspDotnetCore_Project1.Models.IEmployeeRepository
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Solution Explorer
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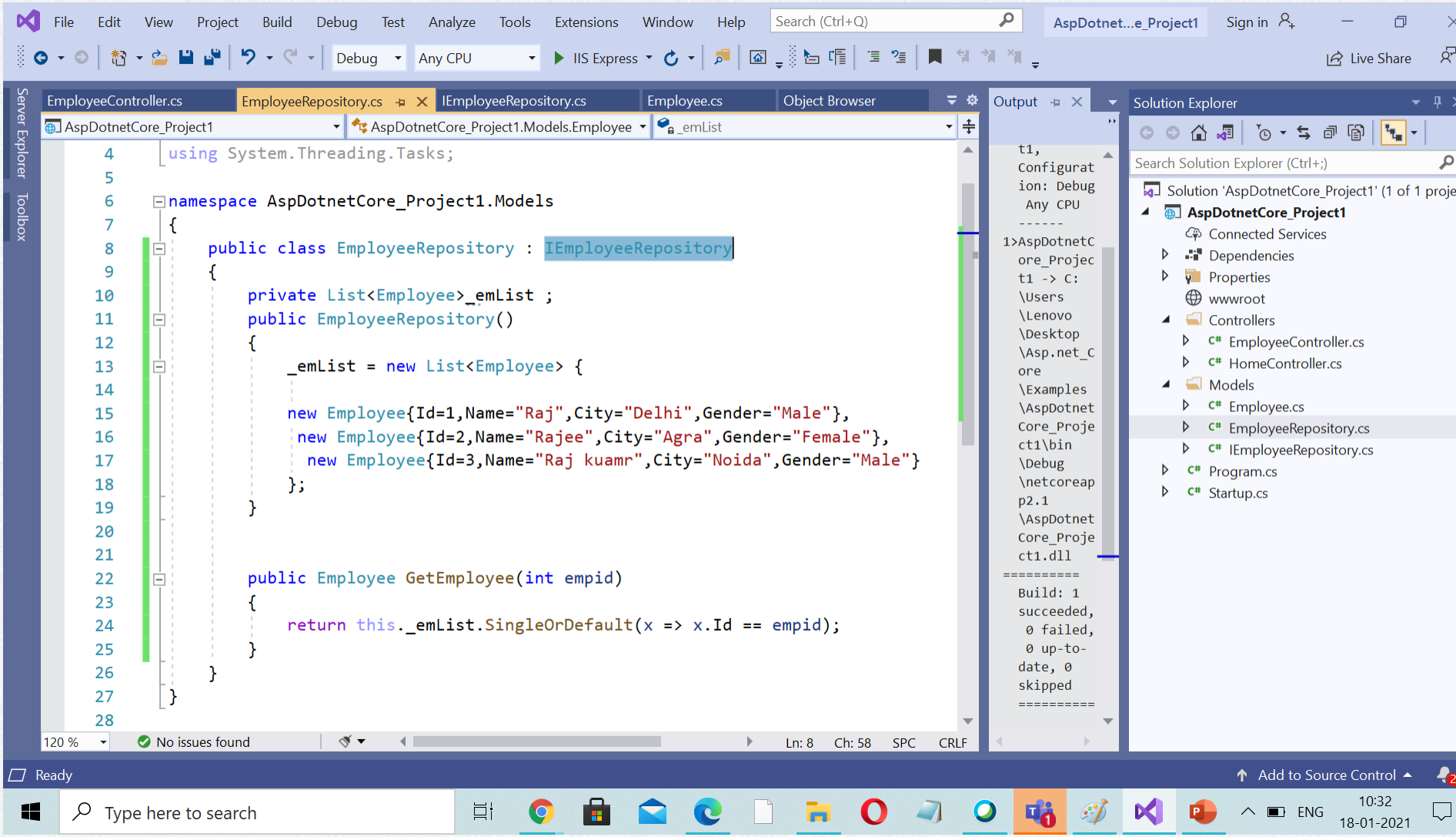
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EmployeeRepository.cs
IEmployeeRepository.cs
Employee.cs
Object Browser
AspDotnetCore_Project1
AspDotnetCore_Project1.Models.Employee
_emList
using System.Threading.Tasks;
namespace AspDotnetCore_Project1.Models
{
public class EmployeeRepository : IEmployeeRepository
{
private List<Employee>_emList ;
public EmployeeRepository()
{
_emList = new List<Employee> {
new Employee{Id=1,Name="Raj",City="Delhi",Gender="Male"},
new Employee{Id=2,Name="Rajee",City="Agra",Gender="Female"},
new Employee{Id=3,Name="Raj kuamr",City="Noida",Gender="Male"}
};
}
public Employee GetEmployee(int empid)
{
return this._emList.SingleOrDefault(x => x.Id == empid);
}
}
}
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Output
Configuration: Debug Any CPU
1>AspDotnetCore_Project1 -> C:\Users\Lenovo\Desktop\Asp.net_Core\Examples\AspDotnetCore_Project1\bin\Debug\netcoreapp2.1\AspDotnetCore_Project1.dll
Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped
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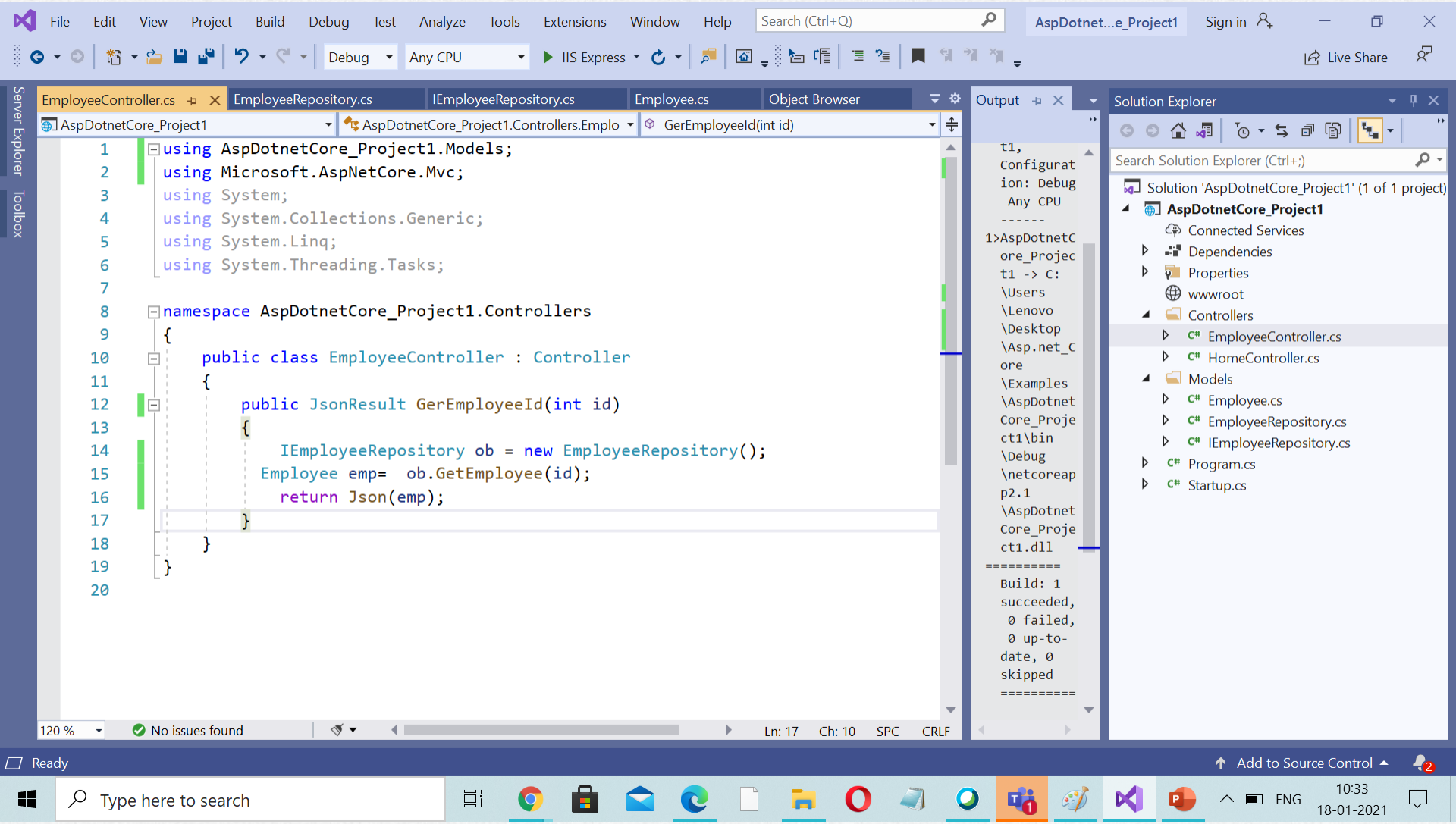
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EmployeeRepository.cs
IEmployeeRepository.cs
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Object Browser
AspDotnetCore_Project1
AspDotnetCore_Project1.Controllers.Emplo
GerEmployeeId(int id)
1 using AspDotnetCore_Project1.Models;
2 using Microsoft.AspNetCore.Mvc;
3 using System;
4 using System.Collections.Generic;
5 using System.Linq;
6 using System.Threading.Tasks;
7
8 namespace AspDotnetCore_Project1.Controllers
9 {
10 public class EmployeeController : Controller
11 {
12 public JsonResult GerEmployeeId(int id)
13 {
14 IEmployeeRepository ob = new EmployeeRepository();
15 Employee emp= ob.GetEmployee(id);
16 return Json(emp);
17 }
18 }
19 }
20
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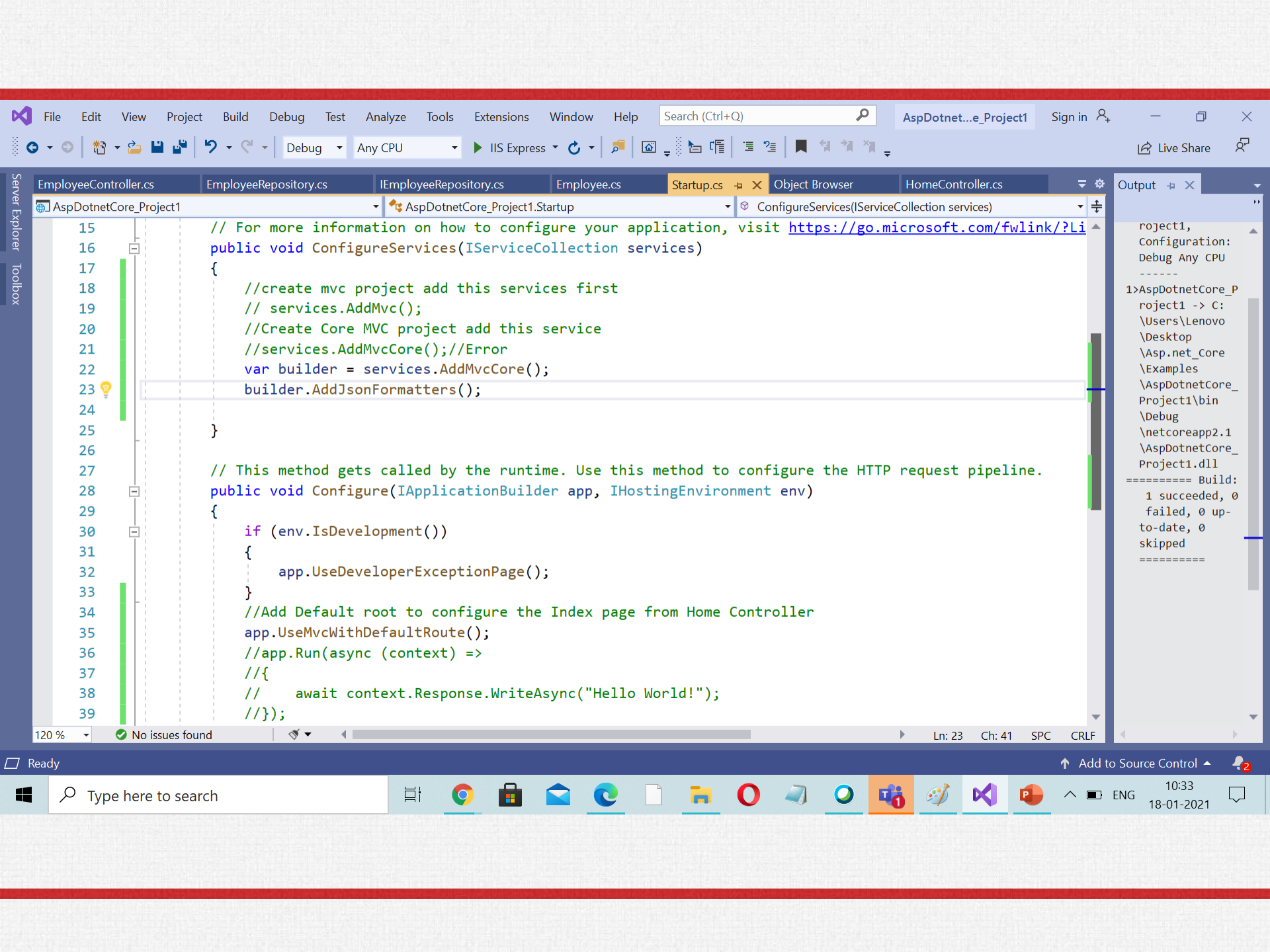
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Employee.cs
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AspDotnetCore_Project1
AspDotnetCore_Project1.Startup
ConfigureServices(IServiceCollection services)
15 // For more information on how to configure your application, visit https://go.microsoft.com/fwlink/?Li
16 public void ConfigureServices(IServiceCollection services)
17 {
18 //create mvc project add this services first
19 // services.AddMvc();
20 //Create Core MVC project add this service
21 //services.AddMvcCore();//Error
22 var builder = services.AddMvcCore();
23 builder.AddJsonFormatters();
24
25 }
26
27 // This method gets called by the runtime. Use this method to configure the HTTP request pipeline.
28 public void Configure(IApplicationBuilder app, IHostingEnvironment env)
29 {
30 if (env.IsDevelopment())
31 {
32 app.UseDeveloperExceptionPage();
33 }
34 //Add Default root to configure the Index page from Home Controller
35 app.UseMvcWithDefaultRoute();
36 //app.Run(async (context) =>
37 //{
38 // await context.Response.WriteAsync("Hello World!");
39 //});
roject1, Configuration: Debug Any CPU
1>AspDotnetCore_Project1 -> C:\Users\Lenovo\Desktop\Asp.net_Core\Examples\AspDotnetCore_Project1\bin\Debug\netcoreapp2.1\AspDotnetCore_Project1.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
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No issues found
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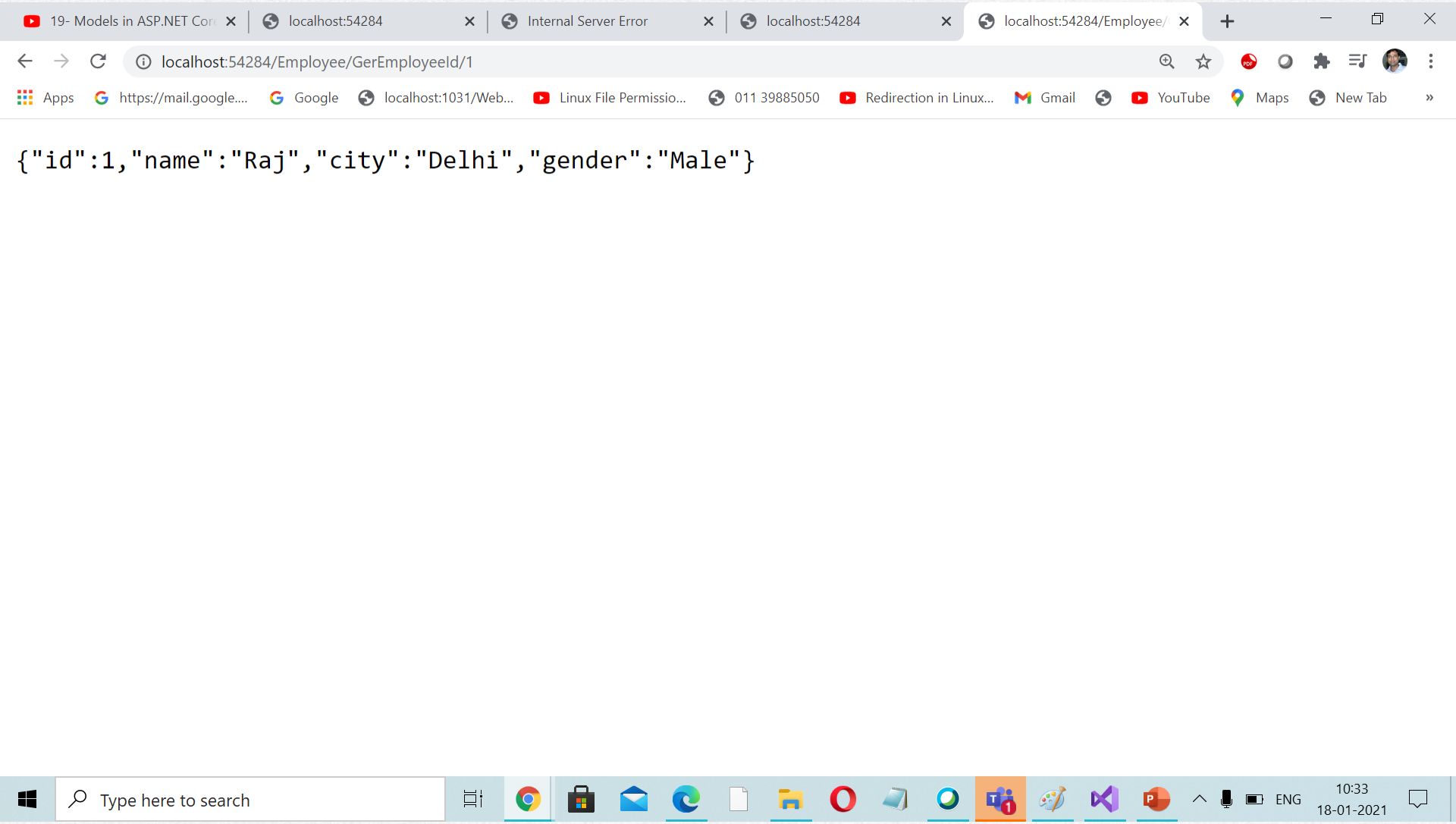
19- Models in ASP.NET Cor
localhost:54284
Internal Server Error
localhost:54284
localhost:54284/Employee/
localhost:54284/Employee/GerEmployeeId/1
Apps
https://mail.google....
Google
localhost:1031/Web...
Linux File Permissio...
011 39885050
Redirection in Linux...
Gmail
YouTube
Maps
New Tab
{"id":1,"name":"Raj","city":"Delhi","gender":"Male"}
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ENG
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18-01-2021

Thanks