**Web API**

1. What does the HTTP status code 200 represent in Web API?
2. What is the meaning of the HTTP status code 400 in Web API?
3. Which HTTP verb is used to retrieve data from a server in Web API?
4. What does the HTTP status code 404 indicate in Web API?
5. Which HTTP verb is used to create a new resource in Web API?
6. What does the HTTP status code 500 signify in Web API?
7. Which HTTP verb is used to update an existing resource in Web API?
8. What is the purpose of the HTTP status code 204 in Web API?
9. Which HTTP verb is used to delete a resource in Web API?
10. What does the HTTP status code 201 indicate in Web API?
11. What is Dependency Injection (DI) in ASP.NET Core?
12. How is the IServiceCollection interface used in configuring DI in ASP.NET Core?
13. What is the difference between AddSingleton, AddScoped, and AddTransient in ASP.NET Core DI?
14. How can you inject a service into a controller in ASP.NET Core?
15. What is Middleware in ASP.NET Core, and how does it work in the request pipeline?

**LINQ**

1. What does LINQ stand for in C#?
2. Which LINQ method is used to filter a collection based on a condition?
3. What is the purpose of the LINQ method Select?
4. Which LINQ method is used to sort a collection in ascending order?
5. What does the LINQ method GroupBy do?
6. Which LINQ method is used to find the first element in a collection that satisfies a condition?
7. What is the difference between First and FirstOrDefault in LINQ?

**Lambda Expressions**

1. What is a lambda expression in C#?
2. How is a lambda expression represented in C# syntax?
3. What is the purpose of the => operator in lambda expressions?
4. Can lambda expressions be used with LINQ methods? If yes, how?
5. What is the difference between a lambda expression and an anonymous method in C#?

**EF Core**

1. What does EF Core stand for in C#?
2. What is the purpose of the DbContext class in EF Core?
3. How does EF Core handle database migrations?
4. What is the purpose of the appsettings.json file in a .NET application?
5. How is the appsettings.json file structured?
6. What is the default location of the appsettings.json file in a .NET project?
7. How can you access configuration values from the appsettings.json file in a .NET application?
8. What is the difference between appsettings.json and appsettings.Development.json?
9. How can you specify environment-specific settings in appsettings.json?
10. What is the purpose of the IConfiguration interface in accessing appsettings.json values?
11. How can you bind a section of appsettings.json to a strongly-typed class in C#?
12. What is a connection string in the context of a .NET application?
13. Where is the connection string typically stored in a .NET application?
14. How can you retrieve a connection string from the appsettings.json file in C#?
15. What is the purpose of the ConnectionStrings section in appsettings.json?
16. How can you use the IConfiguration interface to access a connection string in C#?
17. What is the advantage of storing connection strings in appsettings.json instead of hardcoding them in the application?
18. How can you secure sensitive information, such as connection strings, in appsettings.json?