WebApi Handson 5 Question and Answers

1. CORS Enablement for Web API

- **CORS** allows frontend apps (like React) to call APIs hosted on a different origin.

- To enable:
    - Install `Microsoft.AspNetCore.Cors` (if needed).
    - Add in `Program.cs`:

        ```
        builder.Services.AddCors(options =>
        options.AddPolicy("AllowLocalhost",
        b =>
        b.WithOrigins("http://localhost:3000").AllowAnyMethod().AllowAnyHeader
        ()));
        ```

- Add to middleware:

    ```
    app.UseCors("AllowLocalhost");
    ```

2. Web API Security with JWT

- Use JWT tokens to secure APIs.
- Add in Program.cs:
    ```
    builder.Services.AddAuthentication(...).AddJwtBearer(...);
    app.UseAuthentication();
    app.UseAuthorization();
    ```

- Add [Authorize] to secure endpoints, [AllowAnonymous] to token generation (AuthController).

- Add roles in token using claims:
    ```
    new Claim(ClaimTypes.Role, "Admin")
    ```

- Use [Authorize(Roles = "Admin")] for role-based access.