4 장 완성 코드

src/build.gradle

```
plugins {
    id 'java'
    id 'org.springframework.boot' version '3.0.4'
    id 'io.spring.dependency-management' version '1.1.0'
}

group = 'com.example'
version = '0.0.1-SNAPSHOT'
sourceCompatibility = '17'

repositories {
    mavenCentral()
}

dependencies {
    compileOnly 'org.projectlombok:lombok'
    annotationProcessor 'org.projectlombok:lombok'

    implementation 'org.springframework.boot:spring-boot-starter-data-jpa'
    implementation 'org.springframework.boot:spring-boot-starter-mustache'
    implementation 'org.springframework.boot:spring-boot-starter-web'
    runtimeOnly 'com.h2database:h2'
    testImplementation 'org.springframework.boot:spring-boot-starter-test'
}

tasks.named('test') {
    useJUnitPlatform()
}
```

dto/ArticleForm.java

```java
package com.example.firstproject.dto;

import com.example.firstproject.entity.Article;
import lombok.AllArgsConstructor;
import lombok.ToString;

@AllArgsConstructor
@ToString
public class ArticleForm {
    private String title; // 제목을 받을 필드
    private String content; // 내용을 받을 필드

    public Article toEntity() {
        return new Article(null, title, content);
    }
}
```

entity/Article.java

```java
package com.example.firstproject.entity;

import jakarta.persistence.Column;
import jakarta.persistence.Entity;
import jakarta.persistence.GeneratedValue;
import jakarta.persistence.Id;
import lombok.AllArgsConstructor;
import lombok.ToString;

@AllArgsConstructor
@ToString
@Entity
public class Article {
    @Id
    @GeneratedValue
    private Long id;

    @Column
    private String title;

    @Column
    private String content;

}
```

controller/ArticleController

```java
package com.example.firstproject.controller;

import com.example.firstproject.dto.ArticleForm;
import com.example.firstproject.entity.Article;
import com.example.firstproject.repository.ArticleRepository;
import lombok.extern.slf4j.Slf4j;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PostMapping;

@Slf4j
@Controller
public class ArticleController {
    @Autowired
    private ArticleRepository articleRepository;

    @GetMapping("/articles/new")
    public String newArticleForm() {
        return "articles/new";
    }

    @PostMapping("/articles/create")
    public String createArticle(ArticleForm form) {
        log.info(form.toString());
        // System.out.println(form.toString());

        // 1. DTO를 엔티티로 변환
        Article article = form.toEntity();
        log.info(article.toString());
        // System.out.println(article.toString());

        // 2. 리파지터리로 엔티티를 DB에 저장
        Article saved = articleRepository.save(article);
        log.info(saved.toString());
        // System.out.println(saved.toString());

        return "";
    }
}
```

셀프체크 정답

controller/MemberController.java

```java
package com.example.firstproject.controller;

import com.example.firstproject.entity.Member;
import com.example.firstproject.dto.MemberForm;
import com.example.firstproject.repository.MemberRepository;
import lombok.extern.slf4j.Slf4j;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PostMapping;

@Slf4j
@Controller
public class MemberController {

    @Autowired
    MemberRepository memberRepository;

    @GetMapping("/signup")
    public String signUpPage() {
        return "members/new";
    }

    @PostMapping("/join")
    public String join(MemberForm memberForm) {
        log.info(memberForm.toString());
        Member member = memberForm.toEntity();
        log.info(member.toString());
        Member saved = memberRepository.save(member);
        log.info(saved.toString());
        return "";
    }
}
```

dto/MemberForm.java

```java
package com.example.firstproject.dto;

import com.example.firstproject.entity.Member;
import lombok.AllArgsConstructor;
import lombok.ToString;

@AllArgsConstructor
```

```java
@ToString
public class MemberForm {
    private String email;
    private String password;

    public Member toEntity() {
        return new Member(null, email, password);
    }
}
```