**[java110-servlet]**

**ex01**

**서블릿이란**

ex01/Servlet01.java

**리스너**

ex01/Listener01.java, ex01/Listener02.java

**필터**

ex01/Filter01.java, ex01/Filter02.java

**ex02**

**서블릿**

ex02/Servlet01.java, ex02/Servlet02.java, ex02/Servlet03.java

**ex03**

**클라이언트로 출력하기**

ex03/Servlet01.java, ex03/

**클라이언트로 출력하기 - 한글 깨짐 현상 해결, MIME 타입**

ex03/Servlet02.java

ex03/Servlet03.java

**이미지 출력**

ex03/Servlet04.java

**ex04**

**GET 요청**

ex04/Servlet01.java, ex04/get.html

**POST 요청**

ex04/Servlet02.java, ex04/post.html

**멀티파트 데이터 읽기(파일업로드)**

ex04/Servlet03.java, ex04/file.html

ex04/Servlet04.java, ex04/file2.html

**POST 요청 한글깨짐 해결**

ex04/Servlet05.java, ex04/post2.html

**URL 인코딩**

ex04/Servlet06.java

**ex05**

**GET/POST 구분하기**

ex05/Servlet01.java, ex05/test1.html

**MyHttpServlet**

ex05/MyHttpServlet.java, ex05/Servlet02.java, ex05/test2.html

**MyHttpServlet2 - doGet, doPost 구분하여 처리하기**

ex05/MyHttpServlet2.java, ex05/Servlet03.java, ex05/test3.html

**HttpServlet**

ex05/Servlet04.java, ex05/test4.html

**ex06**

**서블릿 배치 정보 - loadOnStartUp 속성**

ex06/Servlet01.java

**서블릿 배치 정보 - 초기 파라미터(@WebInitParam)**

ex06/Servlet02.java

ex06/Servlet03.java, web.xml

ex06/Servlet04.java, web.xml

ex06/Servlet05.java, web.xml

**ex07**

**리스너(listener)**

ex07/Listener01.java, web.xml

**ServletContext 보관소**

ex07/Servlet01.java, ex07/Servlet02.java

**HttpSession 보관소**

ex07/Servlet03.java, ex07/Servlet04.java

**ex08**

**리프래시(refresh)**

ex08/Servlet01.java

**리다이렉트(redirect)**

ex08/Servlet02.java

**ex09**

**포워드(forward) 이용 계산기 만들기**

ex09/Servlet01.java, ex09/Servlet02.java, ex09/Servlet03.java

**인클루드(include)**

ex09/Servlet04.java, ex09/Servlet05.java, ex09/Servlet06.java

**ex10**

**쿠키(cookie) 보내기**

ex10/Servlet01\_1.java, ex10/Servlet01\_2.java, ex10/Servlet01\_3.java

**쿠키(cookie) 받기**

ex10/Servlet02.java, ex10/Servlet03.java, ex10/Servlet04.java

**ex11**

**hidden 타입 input 필드 사용**

ex11/Servlet01.java, ex11/Servlet02.java, ex11/Servlet03.java, ex11/Servlet04.java

**세션(HttpSession)**

ex11/Servlet11.java, ex11/Servlet12.java, ex11/Servlet13.java, ex11/Servlet14.java

**쿠키의 원리: 세션ID와 쿠키, 세션 timeout, invalidate()**

ex11/Servlet21.java, ex11/Servlet22.java, ex11/Servlet23.java, ex11/Servlet24.java

**ex12**

**로그인폼 출력하기**

ex12/Servlet01.java

**ex13**

**Inventory, ThreadLocal**

ex13/Inventory.java, ex13/Inventory2.java, ex13/Listener01.java

ex13/Servlet01.java, ex13/Servlet02.java

**JSP**

**JSP 구동원리**

jsp/ex01.jsp, jsp/ex02.jsp

**스크립트릿 (<% %>)**

jsp/ex03.jsp, jsp/ex04.jsp

**표현식 (<%= %>)**

jsp/ex05.jsp

**선언부 (<%! %>)**

jsp/ex06.jsp

**지시부 (<%@ %>)**

jsp/ex07.jsp

**지시부 include**

jsp/08.jsp, jsp/08\_1.txt, jsp/08\_2.txt

**<jsp:include>**

jsp/ex09.jsp, jsp/ex09\_1.jsp, jsp/ex09\_2.jsp

**지시부 - taglib**

jsp/ex10.jsp

**빌트인 객체**

jsp/ex11.jsp

**JSP 액션태그 <jsp:useBean>**

jsp/ex12\_1.jsp, jsp/ex12\_2.jsp, jsp/ex12\_3.jsp, jsp/ex14\_4.jsp

jsp/ex12\_5.jsp, jsp/ex12\_6.jsp

**JSP 액션태그 <jsp:setProperty>**

jsp/ex13.jsp

**JSP 액션태그 <jsp:include>**

jsp/ex14.jsp, jsp/ex14\_header.jsp, jsp/ex14\_footer.jsp

**JSP 액션태그 <jsp:forward>**

jsp/ex15.jsp, jsp/ex15\_error.jsp

**EL**

**Expression Langueage**

el/ex01.jsp, el/ex02.jsp, el/ex03.jsp

**EL - 보관소에서 값꺼내기**

el/ex04.jsp, el/ex05.jsp, el/ex06.jsp,

el/ex07.jsp, el/ex08.jsp

**EL - 연산자**

el/09.jsp

**JSTL**

**JSTL**

jstl/ex01.jsp

**JSTL - <c:out>**

jstl/ex02.jsp

**JSTL - <c:set>**

jstl/ex03.jsp

**JSTL - <c:remove>**

jstl/ex04.jsp

**JSTL - <c:if>**

jstl/ex05.jsp

**JSTL - <c:choose>**

jstl/ex06.jsp

**JSTL - <c:forEach>**

jstl/ex07.jsp

**JSTL - <c:forTokens>**

jstl/ex08.jsp

**JSTL - <c:url>**

jstl/ex09.jsp

**JSTL - <c:import>**

jstl/ex10.jsp

**JSTL - <c:redirect>**

jstl/ex11.jsp

**JSTL - <fmt:parseDate>**

jstl/ex12.jsp

**JSTL - <fmt:formatDate>**

jstl/ex13.jsp

**[java110-mybatis]**

**ex01**

**JDBC로 CRUD 작성하기 (커넥션풀 사용)**

ex01/DaoException, ex01/DataSource.java,

Member.java, MemberDao.java, Test01.java

**ex02**

**factory method 및 builder 디자인 패턴 적용**

ex02/DaoBuilder.java, ex02/DaoException.java,

ex02/DataSource.java, ex02/Member.java, ex02/MemberDao.java,

ex02/MemberDaoFactory.java, ex02/Test01.java, jdbc.properties

**ex03**

**Mybatis**

ex03/Member.java, ex03/MemberDao.java, ex03/jdbc.properties,

**<typeAliases>, <mapper>**

ex03/mybatis-config.xml

**<resultMap type="" id=""><id/><result/></resultMap>, <sql>,**

**<select><include refid=""></include></select>, <insert>, <delete>**

ex03/MemberDao.xml

**조회 테스트**

ex03/Test01.java

**입력 테스트**

ex03/Test02.java

**삭제 테스트**

ex03/Test03.java

**한 건 조회 테스트**

ex03/Test04.java

**ex04**

ex04/Member.java, ex04/jdbc.properties, ex04/MemberDao.java

**페이징 처리**

ex04/Test01.java, ex04/mybatis-config-01.xml, ex04/MemberDao-01.xml

**페이징 처리, order by에서 #{} 사용 - 에러**

ex04/Test02\_1.java, ex04/mybatis-config-02.xml, ex04/MemberDao-02.xml

**페이징 처리, order by에서 ${} 사용**

ex04/Test02\_3.java, ex04/mybatis-config-02.xml, ex04/MemberDao-02.xml

**페이징 처리, dynamic sql 사용 <choose><when test=""></when></choose>,**

**<if test=""></if>**

ex04/Test02\_4.java, ex04/Test02\_5.java, ex04/mybatis-config-02.xml, ex04/MemberDao-02.xml

**검색어로 찾기 <where><if test=""></if></where>**

ex04/Test03\_1.java, ex04/mybatis-config-03.xml, ex04/MemberDao-03.xml

**검색어로 찾기 <foreach collection="" item="" open="" separator="," close="">**

ex04/Test03\_2.java, ex04/mybatis-config-03.xml, ex04/MemberDao-03.xml

**ex05**

ex05/Board.java, ex05/BoardDao.java, ex05/Member.java, ex05/MemberDao.java,

ex05/BoardDao-01.xml, ex05/MemberDao-01.xml, ex05/mybatis-config-01.xml

**fk 칼럼으로 지정된 값 가져오기 - select를 별도로 실행**

ex05/Test01\_1.java, ex05/Test01\_2.java

**ex06**

ex06/Board.java, ex06/BoardDao.java, ex06/BoardDao-01.xml,

ex06/jdbc.properties, ex06/mybatis-config-01.xml

**fk 칼럼으로 지정된 값 가져오기 - join하여 가져오기, using()**

ex06/Test01.java

**fk 칼럼으로 지정된 값 가져오기 - join하여 가져오기(높은 응집력 어기는 예)**

ex06/Test02.java

**ex07**

ex07/Board.java, ex07/BoardDao.java, ex07/Member.java, ex07/MemberDao.java,

ex07/BoardDao-01.xml, ex07/jdbc.properties, ex07/mybatis-config-01.xml

**fk 칼럼으로 지정된 값 가져오기 - join하여 가져오기**

ex07/Test01.java

**fk 칼럼으로 지정된 값 가져오기 - <association property="" javaType="">**

ex07/Test02.java

**ex08**

ex08/AttachFile.java, ex08/Board.java, ex08/Member.java,

ex08/BoadDao.java, ex08/BoardDao-01.xml,

ex08/jdbc.properties, ex08/mybatis-config-01.xml

**fk 칼럼으로 지정된 값 가져오기 - 첨부 파일 가져오기**

ex08/Test01.java

**fk 칼럼으로 지정된 값 가져오기 - 첨부 파일 가져오기 <collection property="" ofType="">**

ex08/Test02.java

**[java110-spring-ioc]**

**ex01**

**객체생성**

ex01/Car.java, Test01.java

**Factory 패턴(static)**

ex01/CarFactory1.java, ex01/Car.java, ex01/Test02.java

**Factory 패턴(new)**

ex01/CarFactory2.java, ex01/Car.java, ex01/Test03.java

**Spring IoC 컨테이너**

ex01/Car.java, ex01/app-context.xml, ex01/Test04.java

**Spring IoC 컨테이너(static)**

ex01/CarFactory1.java, ex01/Car.java, ex01/app-context2.xml, ex01/Test5.java

**Spring IoC 컨테이너(new)**

ex01/CarFactory2.java, ex01/Car.java, ex01/app-context3.xml, ex01/Test6.java

**ex02**

**ClassPathXmlApplicationContext**

ex02/Car.java, ex02/app-context-1.xml, ex02/Test01.java

**FileSystemXmlApplicationContext**

ex02/Car.java, ex02/app-context-1.xml, ex02/Test02.java

**AnnotationConfigApplicationContext**

ex02/Car.java, ex02/AppConfig.java, ex02/Test03.java

**ex03**

**[xml설정] XML에 객체 설정하는 방법, 보관 객체 확인 <bean>**

ex03/Car.java, ex03/app-context-1.xml, ex03/Test01.java

**[xml설정] 객체의 아이디와 별명**

ex03/Car.java, ex03/app-context-2.xml, ex03/Test02.java

**[xml설정] 컨테이너에서 객체 꺼내기**

ex03/Car.java, ex03/app-context-3.xml, ex03/Test03.java

**[xml설정] 객체 scope**

ex03/Car.java, ex03/app-context-4.xml, ex03/Test04.java

**ex04**

**[xml설정] 객체 생성자 호출 <constructor-arg>**

ex04/Car.java, ex04/app-context1.xml, ex04/Test01.java

**[xml설정] 객체 생성자 호출. 파라미터 값으로 객체 주입**

ex04/Car.java, ex04/Engine.java, ex04/app-context2.xml, ex04/Test02.java

**[xml설정] 객체 생성자 호출(p 네임스페이스)**

ex04/Car.java, ex04/Engine.java, ex04/app-context3.xml, ex04/Test03.java

**ex05**

**[xml설정] setter 호출 <property>**

ex05/Car.java, ex05/Engine.java, ex05/Test01.java, ex05/app-context-1.xml

**[xml설정] setter 호출(Array, List 프로퍼티)**

ex05/Car.java,ex05/CD.java, ex05/Engine.java, ex05/Tire.java,

ex05/Test02.java, ex05/app-context-2.xml

ex05/Test04.java, ex05/app-context-4.xml

**== 과 equals()**

ex05/Test02\_p1.java, ex05/Test02\_p2.java

**equals()와 hashCode()**

ex05/Test02\_p3.java, ex05/Test02\_p4.java

**[xml설정] setter 호출(Set 프로퍼티)**

ex05/Car.java, ex05/Tire.java, ex05/Test03.java, ex05/app-context-3.xml

**[xml설정] setter 호출(Map 프로퍼티)**

ex05/Car.java, ex05/Test05.java, ex05/app-context-5.xml

**[xml설정] setter 호출(p 네임스페이스)**

ex05/Car.java, ex05/Engine.java, ex05/Test06.java, ex05/app-context-6.xml

**[xml설정] setter 호출 : 의존 객체 주입 순서**

ex05/Car.java, ex05/Engine.java, ex05/Test07.java, ex05/app-context-7.xml

**ex06**

**[xml설정] Factory 패턴(static)**

ex06/Engine.java, ex06/Test01.java, ex06/app-context-1.xml, ex06/EngineFactory1.java

**[xml설정] Factory 패턴(new)**

ex06/Engine.java, ex06/Test01.java, ex06/app-context-1.xml, ex06/EngineFactory2.java

**[xml설정] Factory 패턴(FactoryBean 인터페이스 구현)**

ex06/Engine.java, ex06/Test01.java, ex06/app-context-1.xml, ex06/EngineFactory3.java

**[xml설정] Factory 패턴(FactoryBean 인터페이스 구현)**

ex06/Engine.java, ex06/Test01.java, ex06/app-context-1.xml, ex06/EngineFactoryBean.java

**ex07**

**[xml설정] 커스텀 프로퍼티 에디터(PropertyEditorSupport)**

ex07/Car.java, ex07/Engine.java, ex07/DatePropertyEditor.java,

ex07app-context-1.xml/, ex07/Test01.java

**ex08**

**[xml+java설정] @Autowired 애노테이션과 BeanPostProcessor**

ex08/Car.java, ex08/Engine.java, ex08/MyBeanPostProcessor.java

ex08/app-context-1.xml, ex08/Test01.java

**[xml+java설정] 의존 객체 자동 주입 : <context:annotation-config/>**

ex08/Car.java, ex08/Engine.java, ex08/app-context-2.xml, ex08/Test02.java

**[xml+java설정] @Autowired field에 붙이기**

ex08/Car2.java, ex08/Engine.java, ex08/app-context-3.xml, ex08/Test03.java

**[xml+java설정] @Autowired에서 같은 타입의 객체가 여러 개일 때(에러)**

ex08/Car2.java, ex08/Engine.java, ex08/app-context-4.xml, ex08/Test04.java

**[xml+java설정] 해결책 @Qualifier**

ex08/Car3.java, ex08/Engine.java, ex08/app-context-5.xml, ex08/Test05.java

**[xml+java설정] @Resource, JSR, JCP**

ex08/Car4.java, ex08/Engine.java, ex08/app-context-6.xml, ex08/Test06.java

**ex09**

**[xml+java설정] @Component, @Controller, @Service, @Respository, @RestController**

ex09/Car.java, ex09/Engine.java, ex09/app-context-1.xml, ex09/Test01.java

**[xml+java설정] @Component에서 id 생략**

ex09/Car2.java, ex09/Engine.java, ex09/app-context-1.xml, ex09/Test01.java

**[xml+java설정] 의존 객체 자동 주입 : 생성자**

ex09/Car3.java, ex09/Engine.java, ex09/app-context-2.xml, ex08/Test02.java

**ex10**

**[java설정] AppConfig.java, @Bean**

ex10/Car.java, ex10/Engine.java, ex10/AppConfig.java, ex10/Test01.java