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/*
Pro Spring
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*/

//spring.xml
<!DOCTYPE beans PUBLIC "-//SPRING//DTD BEAN//EN" "http://www.springframework.org/dtd/spring-beans.dtd">
<beans>
  <bean id="messageDigest" class="MessageDigestFactoryBean">
    <property name="algorithmName">
      <value>SHA1</value>
    </property>
  </bean>
</beans>

```

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```

import java.security.MessageDigest;

import org.springframework.beans.factory.FactoryBean;
import org.springframework.beans.factory.InitializingBean;

public class MessageDigestFactoryBean implements FactoryBean, InitializingBean {

  private String algorithmName = "MD5";

  private MessageDigest messageDigest = null;

  public Object getObject() throws Exception {
    return messageDigest;
  }

  public Class getObjectType() {
    return MessageDigest.class;
  }

  public boolean isSingleton() {
    return true;
  }

  public void afterPropertiesSet() throws Exception {
    messageDigest = MessageDigest.getInstance(algorithmName);
  }

  public void setAlgorithmName(String algorithmName) {
    this.algorithmName = algorithmName;
  }
}

```

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```
import java.security.MessageDigest;

import org.springframework.beans.factory.BeanFactory;
import org.springframework.beans.factory.xml.XmlBeanFactory;
import org.springframework.core.io.FileSystemResource;

public class AccessingFactoryBeans {

    public static void main(String[] args) {
        BeanFactory factory = new XmlBeanFactory(new FileSystemResource(
            "build/spring.xml"));

        MessageDigest digest = (MessageDigest) factory
            .getBean("messageDigest");

        MessageDigestFactoryBean factoryBean = (MessageDigestFactoryBean) factory
            .getBean("&messageDigest");
    }
}
```