Assignment No	6
Title	Constructor Injection & Bean Lifecycle
Objective	Design an application to use Constructor Injection. Add Bean Lifecycle methods
Roll No	MCA2511

1. Design an application to use Constructor Injection. Add Bean Lifecycle methods.

Source Code:

AddressBean.java

```
package edu.met.p1;

public class AddressBean {
	String  street;
	String city;
	String state;

	public String getStreet() {
		return street;
	}
	public void setStreet(String street) {
		this.street = street;
	}
	public String getCity() {
		return city;
	}
	public void setCity(String city) {
		this.city = city;
	}
	public String getState() {
		return state;
	}
```

```
	public void setState(String state) {
		this.state = state;
	}

	@Override
	public String toString() {
		return "AddressBean [street=" + street + ", city=" + city + ", state=" + state +
"]";
	}
}
```

StudentBean.java

```
package edu.met.p1;

public class StudentBean {
	int rollNo;
	String name;
	AddressBean address;

	public StudentBean(int rollNo, String name, AddressBean address) {
		super();
		this.rollNo = rollNo;
		this.name = name;
		this.address = address;
	}

	public void init() throws Exception
	{
		System.out.println("Init called");
	}
	public void destroy() throws Exception
	{
		System.out.println("Destroy called");
	}
	@Override
	public String toString() {
		return "StudentBean [rollNo=" + rollNo + ", name=" + name + ", address=" +
address + "]";
	}
}
```

StudentImpl.java

```
package edu.met.p1;
import org.springframework.context.*;
import org.springframework.context.support.*;

public class StudentImpl {
	private static ConfigurableApplicationContext ctx;
	public static void main(String[] args) {
		ctx = new ClassPathXmlApplicationContext("AppCtx.xml");
		StudentBean s1 = (StudentBean)ctx.getBean("Student");
		System.out.println(s1);
		ctx.close();
	}
}
```

AppCtx.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<beans
   xmlns="http://www.springframework.org/schema/beans"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:p="http://www.springframework.org/schema/p"
   xsi:schemaLocation="http://www.springframework.org/schema/beans
        http://www.springframework.org/schema/beans/spring-beans-3.0.xsd">

	<bean id="Address" class="edu.met.p1.AddressBean">
		<property name="street" value="1st Street" />
		<property name="city" value="Mumbai" />
		<property name="state" value="Maharashtra" />
	</bean>
	<bean id="Student" class="edu.met.p1.StudentBean" init-method="init"
destroy-method="destroy">
		<constructor-arg index="0" value="100" />
		<constructor-arg index="1" value="Mukund" />
		<constructor-arg index="2" >
			<ref bean="Address" />
		</constructor-arg>
	</bean>
 </beans>
```

Output:

```
Init called
StudentBean [rollNo=100, name=Mukund, address=AddressBean [street=1st Street, city=Mumbai, state=Maharashtra]]
Destroy called
```