

## Handson 10<sup>th</sup>

Implementation of Constructor injection:

**Education.java:**

```
package com.mou.sprincores.e2;

public class Education {
    public Education(String courseName, String specialisation, int duration)
    {
        super();
        this.courseName = courseName;
        this.specialisation = specialisation;
        this.duration = duration;
    }
    private String courseName;
    private String specialisation;
    private int duration;
    public String getCourseName() {
        return courseName;
    }
    public void setCourseName(String courseName) {
        this.courseName = courseName;
    }
    public String getSpecialisation() {
        return specialisation;
    }
    public void setSpecialisation(String specialisation) {
        this.specialisation = specialisation;
    }
    public int getDuration() {
        return duration;
    }
    public void setDuration(int duration) {
        this.duration = duration;
    }
    @Override
    public String toString() {
        return "courseName=" + courseName + ", specialisation=" +
specialisation + ", duration=" + duration
        + "years";
    }
}
```

**Student.java:**

```
package com.mou.sprincores.e2;

public class Student {
    public Student(int roll, String name, Education education) {
        super();
        this.roll = roll;
        this.name = name;
        this.education = education;
    }
    private int roll;
```

```

    private String name;
    private Education education;
    public int getRoll() {
        return roll;
    }
    public void setRoll(int roll) {
        this.roll = roll;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public Education getEducation() {
        return education;
    }
    public void setEducation(Education education) {
        this.education = education;
    }
    @Override
    public String toString() {
        return "Student's roll=" + roll + ", name=" + name + ",
education=" + education;
    }
}

```

## Test.java:

```

package com.mou.sprincres.e2;
import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;

public class Test {

    public static void main(String[] args) {
        @SuppressWarnings("resource")
        ApplicationContext context=new
ClassPathXmlApplicationContext("com/mou/sprincres/e2/NewFile.xml");
        @SuppressWarnings("unused")
        Student p=(Student) context.getBean("stu");
        System.out.println(p);
    }
}

```

## NewFile.xml:

```

<beans xmlns="http://www.springframework.org/schema/beans"

        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:context="http://www.springframework.org/schema/context"

        xmlns:p="http://www.springframework.org/schema/p"

        xsi:schemaLocation="http://www.springframework.org/schema/beans
http://www.springframework.org/schema/beans/spring-beans.xsd
http://www.springframework.org/schema/context

```

```

http://www.springframework.org/schema/context/spring-context.xsd">
<bean id="edu" class="com.mou.sprincor.es.e2.Education">
<constructor-arg value="B.Tech"/>
<constructor-arg value="Computer Science and Engineering"/>
<constructor-arg value="4"/>
</bean>
<bean id="stu" class="com.mou.sprincor.es.e2.Student">
<constructor-arg value="1" />
<constructor-arg value="Moupali Sen"/>
<constructor-arg ref="edu"/>
</bean>
</beans>

```

## OUTPUT:

