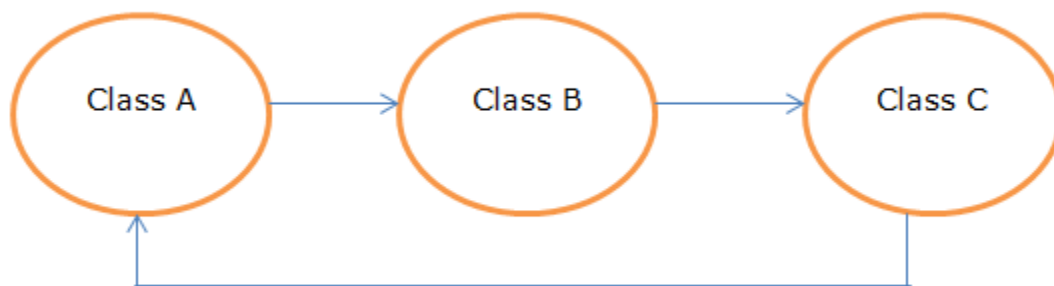**Dependency-on**

If one bean has a dependency on another bean called as depends-on concepts.

Why?

If class A is depends on B, class B depends on class c then we should go for dependency on concepts.

Note- Mutual dependency is not allowed here as shown in below fig as-

Program-

A.java

```
package com.test;

public class A {

    public A() {
        System.out.println("A object");
    }
}
```

B.java

```
package com.test;

public class B {

    public B() {
```

```java
        System.out.println("B object");
    }
}
```

C.java

```java
package com.test;

public class C {

    public C() {
        System.out.println("C object");
    }
}
```

Spring.xml

```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"
    xsi:schemaLocation="http://www.springframework.org/schema/beans
    http://www.springframework.org/schema/beans/spring-beans-2.5.xsd">

    <bean id="a" class="com.demo.A" depends-on="b"></bean>
    <bean id="b" class="com.demo.B" depends-on="c"></bean>
    <bean id="c" class="com.demo.C"></bean>

</beans>
```

Test.java

```java
package com.test;

import org.springframework.context.ApplicationContext;
```

```java
import org.springframework.context.support.ClassPathXmlApplicationContext;

public class Test {

    public static void main(String[] args) {

        ApplicationContext ap=new ClassPathXmlApplicationContext("spring.xml");
    }
}
```

Output-

A object

C object

B object

```xml
<project xmlns="http://maven.apache.org/POM/4.0.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <groupId>spring</groupId>
    <artifactId>SpringDemo</artifactId>
    <version>0.0.1-SNAPSHOT</version>
    <dependencies>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-core</artifactId>
            <version>${spring.version}</version>
        </dependency>

        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring-context</artifactId>
            <version>${spring.version}</version>
```

```xml
        </dependency>

    </dependencies>
    <properties>
        <spring.version>3.2.3.RELEASE</spring.version>
    </properties>
</project>
```