

1.ANNOTATION PROGRAM

```
package anno;

import java.lang.annotation.ElementType;
import java.lang.annotation.Retention;
import java.lang.annotation.RetentionPolicy;
import java.lang.annotation.Target;
import java.lang.annotation.*;
import java.lang.reflect.*;

@Target(ElementType.METHOD)
@Retention(RetentionPolicy.RUNTIME)

@interface Test{

    String TestCase();

}

class test1{

    @Test(TestCase = "This is just a test case for Annotation")
    public void sayHello()
    {
        System.out.println("hello annotation");
    }

}

public class annaOne {

    public static void main(String[] args) throws Exception {

        test1 t = new test1();

        Method d = t.getClass().getMethod("sayHello");

        Annotation ann = d.getAnnotation(Test.class);

        Test ts = (Test)ann;

        System.out.println( ts.TestCase());

    }
}
```

2.program

```
package anno;
```

```
import java.lang.annotation.ElementType;
```

```
import java.lang.annotation.Retention;
```

```
import java.lang.annotation.RetentionPolicy;
```

```
import java.lang.annotation.Target;
```

```
import java.lang.annotation.Annotation;
```

```
@Target(ElementType.TYPE)
```

```
@Retention (RetentionPolicy.RUNTIME)
```

```
@interface Info {
```

```
    int AuthorID () default 1;
```

```
    String Author() default "Glenn";
```

```
    String Supervisor() default "raj";
```

```
    String Date() default "01/11/2021";
```

```
    String Tlme() default "11:11";
```

```
    int Version() default 10;
```

```
    String Description() default "This is just an assignment on annotations";
```

```
}
```

```
@Info ()
```

```
class myclass{
```

```
}
```

```
public class annaTwo {
```

```

public static void main(String[] args) {

    myclass ns = new myclass();

    Class f = ns.getClass();
    Annotation annn = f.getAnnotation(Info.class);
    Info i = (Info)annn;
    System.out.println("AuthorID:"+i.AuthorID());
    System.out.println("Author:"+i.Author());
    System.out.println("Supervisor:"+i.Supervisor());
    System.out.println("Date:"+i.Date());
    System.out.println("Time:"+i.Tlme());
    System.out.println("Version:"+i.Version());
    System.out.println("Description:"+i.Description());

}

}

```

3.program annotations

```

package anno;

import java.lang.annotation.ElementType;
import java.lang.annotation.Retention;
import java.lang.annotation.RetentionPolicy;
import java.lang.annotation.Target;
import java.lang.annotation.*;
import java.lang.reflect.*;

```

```

@Target(ElementType.METHOD)
@Retention(RetentionPolicy.RUNTIME)

```

```

@interface Execute{

    int Sequence() ;

}

class MyClass1{

    @Execute(Sequence=2)
    public void myMethod1()
    {
        System.out.println("In method1 giving priority to sequence 2");
    }

    @Execute(Sequence=1)
    public void myMethod2()
    {
        System.out.println("In method2 giving priority to sequence 1");
    }

    @Execute(Sequence=3)
    public void myMetho31()
    {
        System.out.println("In method3 giving priority to sequence 3");
    }
}

public class annaThree {

    public static void main(String[] args) throws Exception {

        MyClass1 mc = new MyClass1();

        Method e = mc.getClass().getMethod("myMethod1");
        Annotation ann = e.getAnnotation(Execute.class);
        Execute ts = (Execute)ann;
        System.out.println( ts.Sequence());

    }

}

```