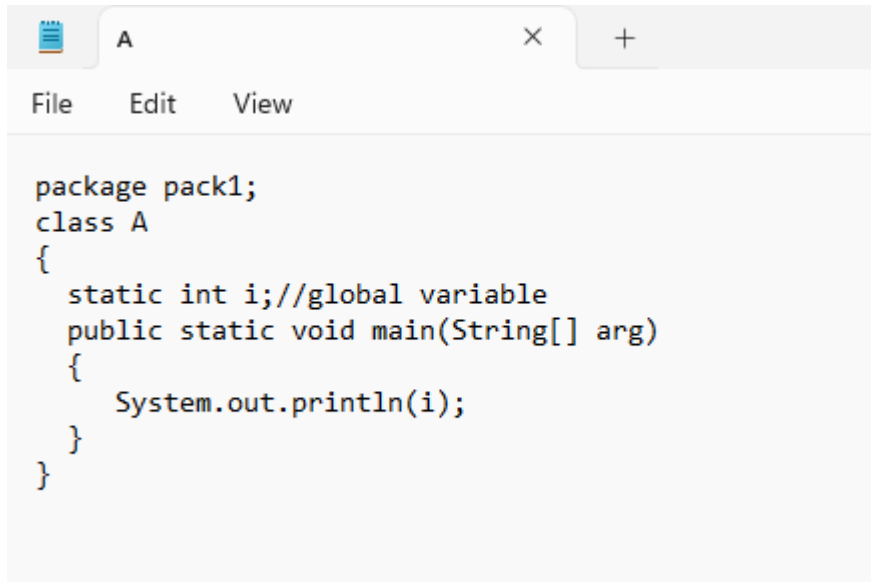


## Day 5

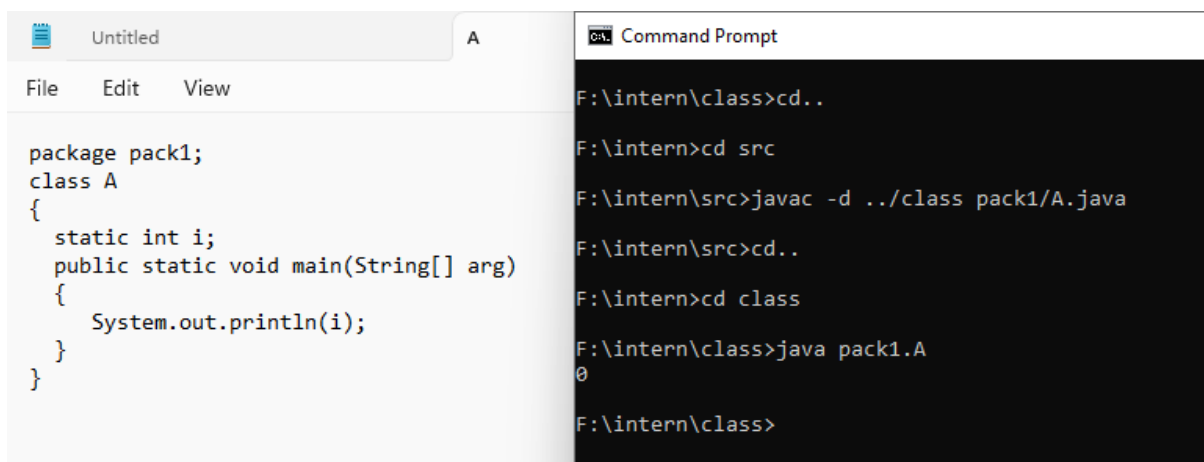
### Global variables

Global variables are declared inside the class and top of all the main method.



```
package pack1;
class A
{
    static int i;//global variable
    public static void main(String[] arg)
    {
        System.out.println(i);
    }
}
```

- Whenever declare static variable for integer default value is 0.
- Static members are executing first from top to bottom. Then main method executes.



```
package pack1;
class A
{
    static int i;
    public static void main(String[] arg)
    {
        System.out.println(i);
    }
}
```

```
F:\intern\class>cd..
F:\intern>cd src
F:\intern\src>javac -d ../class pack1/A.java
F:\intern\src>cd..
F:\intern>cd class
F:\intern\class>java pack1.A
0
F:\intern\class>
```

A

File Edit View

```
package pack1;
class A
{
    static int i=0;
    public static void main(String[] arg)
    {
        System.out.println("a:"+i);
        i=10;
        System.out.println("b:"+i);
        i=20;
        System.out.println("c:"+i);
    }
}
```

Command Prompt

Microsoft Windows [Version 10.0.22000.2176]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>f:

F:\>cd intern
F:\intern>cd src
F:\intern\src>javac -d ../class pack1/A.java
F:\intern\src>cd..
F:\intern>cd class
F:\intern\class>java pack1.A
a:0
b:10
c:20

F:\intern\class>

A

File Edit View

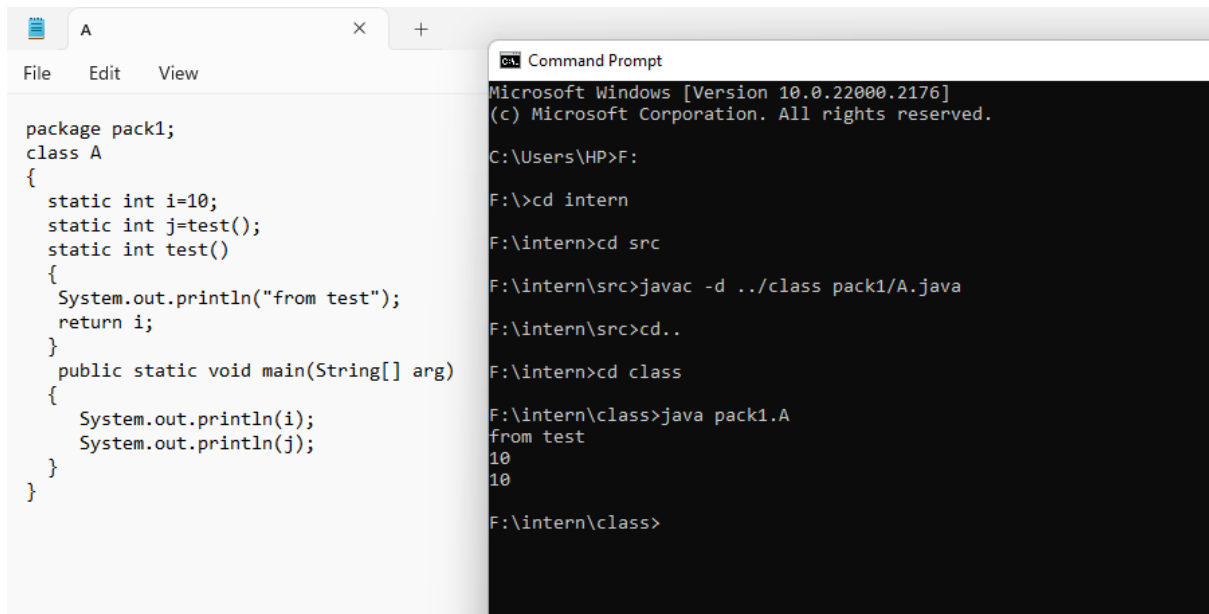
```
package pack1;
class A
{
    static int i=0;
    public static void main(String[] arg)
    {
        int i=20;
        System.out.println(i);
        i=20;
        System.out.println(A.i);
    }
}
```

Command Prompt

F:\intern>cd src
F:\intern\src>javac -d ../class pack1/A.java
pack1\A.java:10: error: cannot find symbol
 System.out.println(N.i);
 ^
symbol: variable N
location: class A
1 error

F:\intern\src>javac -d ../class pack1/A.java
F:\intern\src>cd..
F:\intern>cd class
F:\intern\class>java pack1.A
20
0

F:\intern\class>



The screenshot shows an IDE window with a file named 'A' containing the following Java code:

```
package pack1;
class A
{
    static int i=10;
    static int j=test();
    static int test()
    {
        System.out.println("from test");
        return i;
    }
    public static void main(String[] arg)
    {
        System.out.println(i);
        System.out.println(j);
    }
}
```

The Command Prompt window shows the following commands and output:

```
Microsoft Windows [Version 10.0.22000.2176]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>F:

F:\>cd intern

F:\intern>cd src

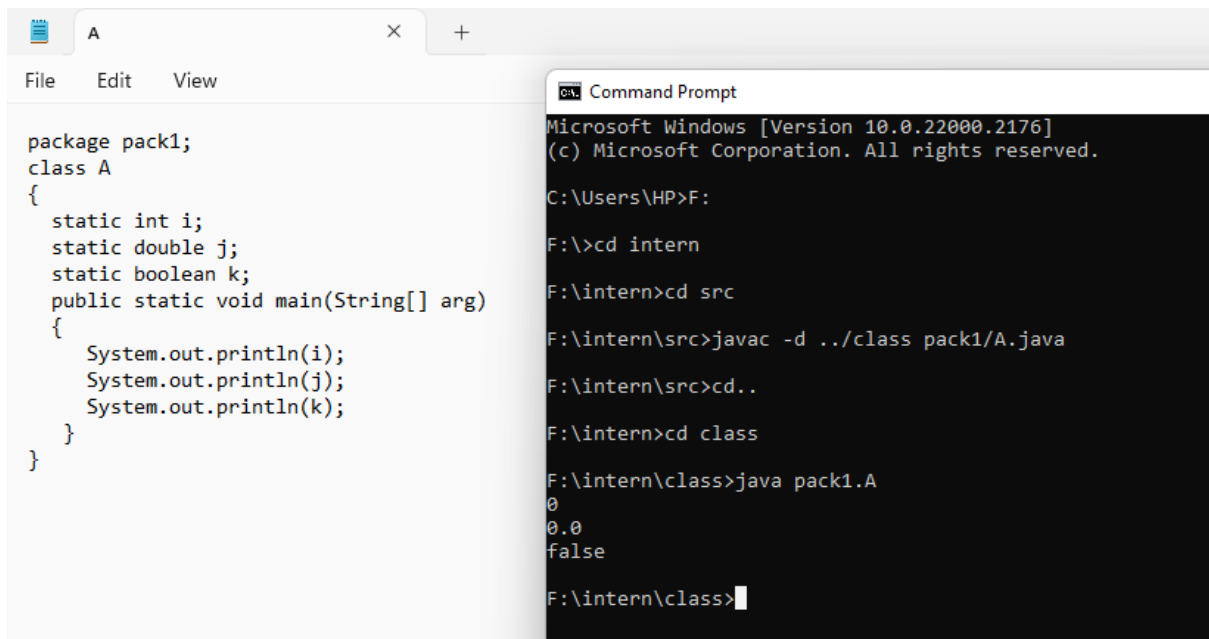
F:\intern\src>javac -d ../class pack1/A.java

F:\intern\src>cd..

F:\intern>cd class

F:\intern\class>java pack1.A
from test
10
10

F:\intern\class>
```



The screenshot shows an IDE window with a file named 'A' containing the following Java code:

```
package pack1;
class A
{
    static int i;
    static double j;
    static boolean k;
    public static void main(String[] arg)
    {
        System.out.println(i);
        System.out.println(j);
        System.out.println(k);
    }
}
```

The Command Prompt window shows the following commands and output:

```
Microsoft Windows [Version 10.0.22000.2176]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>F:

F:\>cd intern

F:\intern>cd src

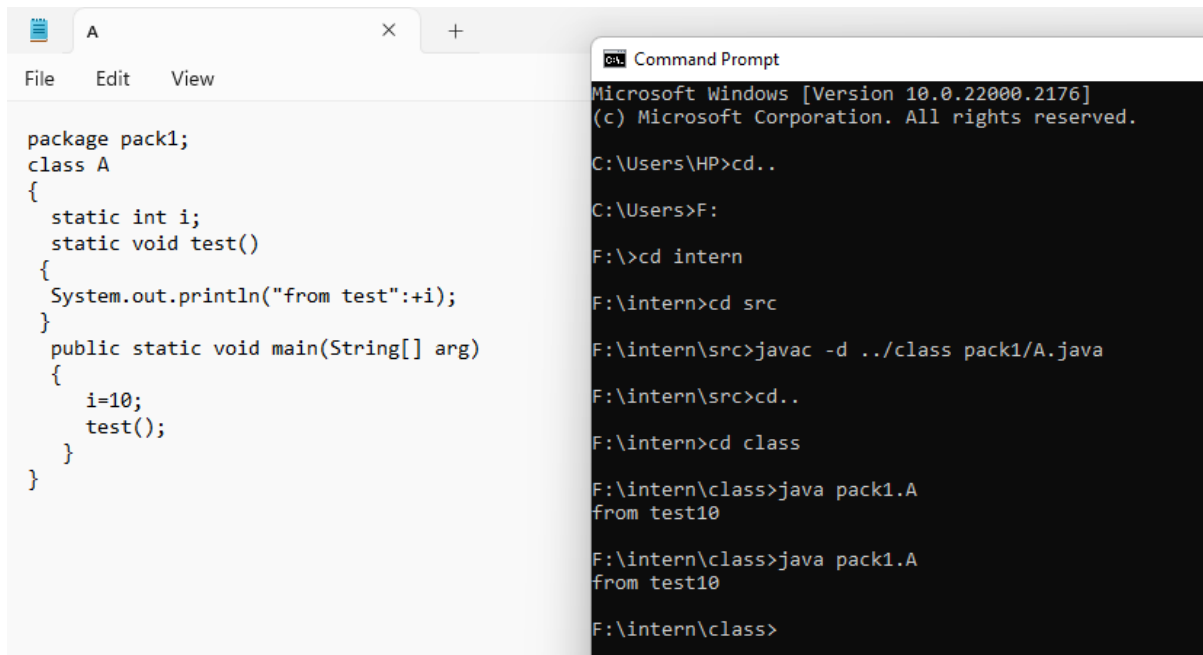
F:\intern\src>javac -d ../class pack1/A.java

F:\intern\src>cd..

F:\intern>cd class

F:\intern\class>java pack1.A
0
0.0
false

F:\intern\class>
```



The screenshot shows an IDE window with a file named 'A' containing the following Java code:

```
package pack1;
class A
{
    static int i;
    static void test()
    {
        System.out.println("from test":+i);
    }
    public static void main(String[] arg)
    {
        i=10;
        test();
    }
}
```

The Command Prompt window shows the following commands and output:

```
Microsoft Windows [Version 10.0.22000.2176]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>cd..

C:\Users>F:

F:\>cd intern

F:\intern>cd src

F:\intern\src>javac -d ../class pack1/A.java

F:\intern\src>cd..

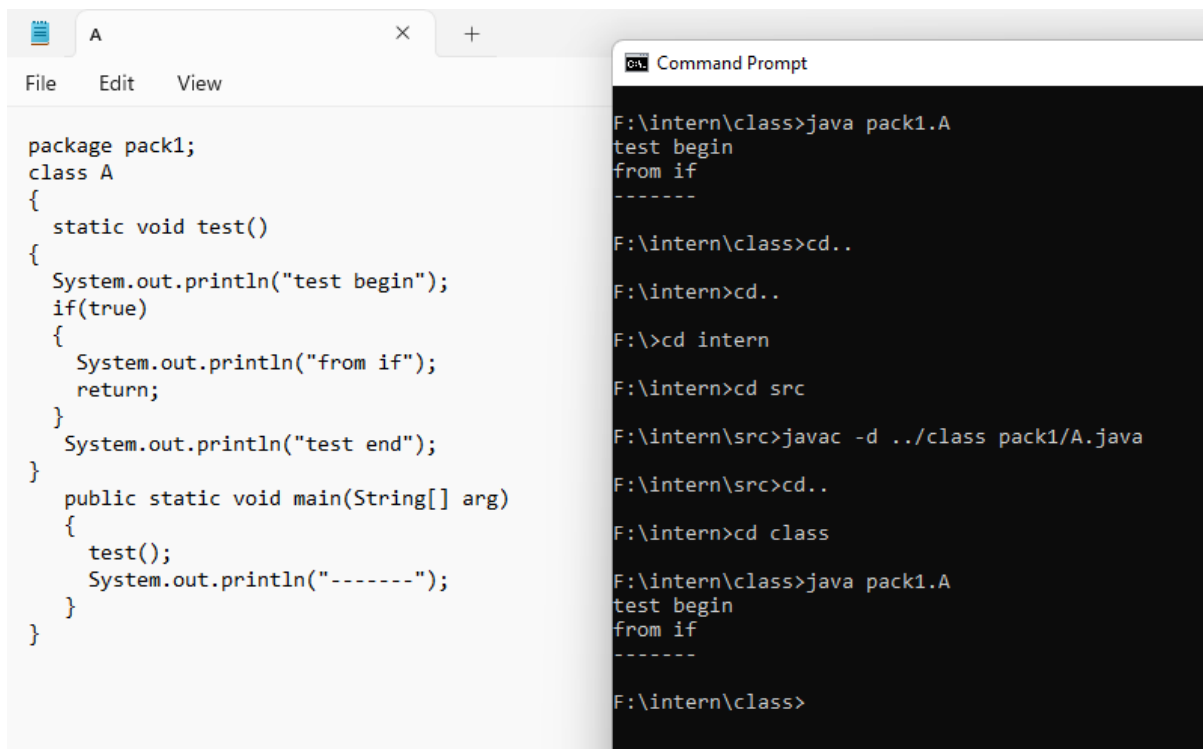
F:\intern>cd class

F:\intern\class>java pack1.A
from test10

F:\intern\class>java pack1.A
from test10

F:\intern\class>
```

- Return statement should be a last statement in the block.



The screenshot shows an IDE window with a file named 'A' containing the following Java code:

```
package pack1;
class A
{
    static void test()
    {
        System.out.println("test begin");
        if(true)
        {
            System.out.println("from if");
            return;
        }
        System.out.println("test end");
    }
    public static void main(String[] arg)
    {
        test();
        System.out.println("-----");
    }
}
```

The Command Prompt window shows the following commands and output:

```
F:\intern\class>java pack1.A
test begin
from if
-----

F:\intern\class>cd..

F:\intern>cd..

F:\>cd intern

F:\intern>cd src

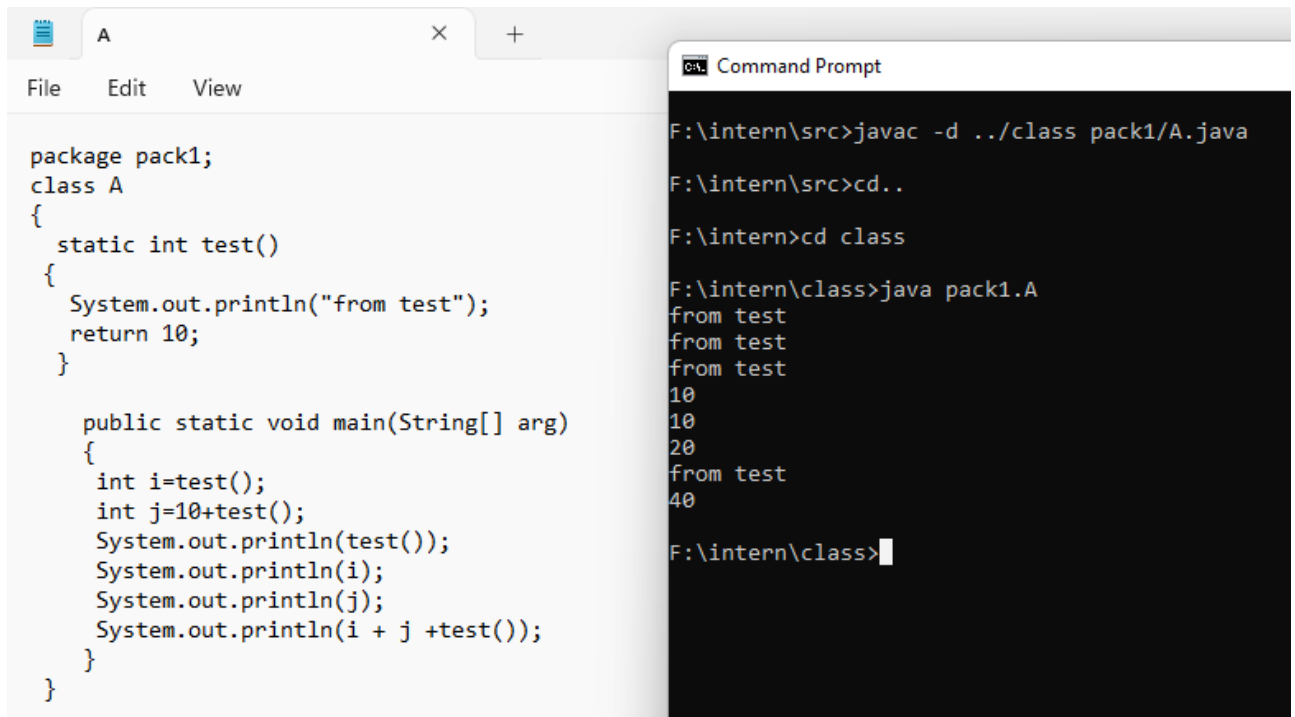
F:\intern\src>javac -d ../class pack1/A.java

F:\intern\src>cd..

F:\intern>cd class

F:\intern\class>java pack1.A
test begin
from if
-----

F:\intern\class>
```



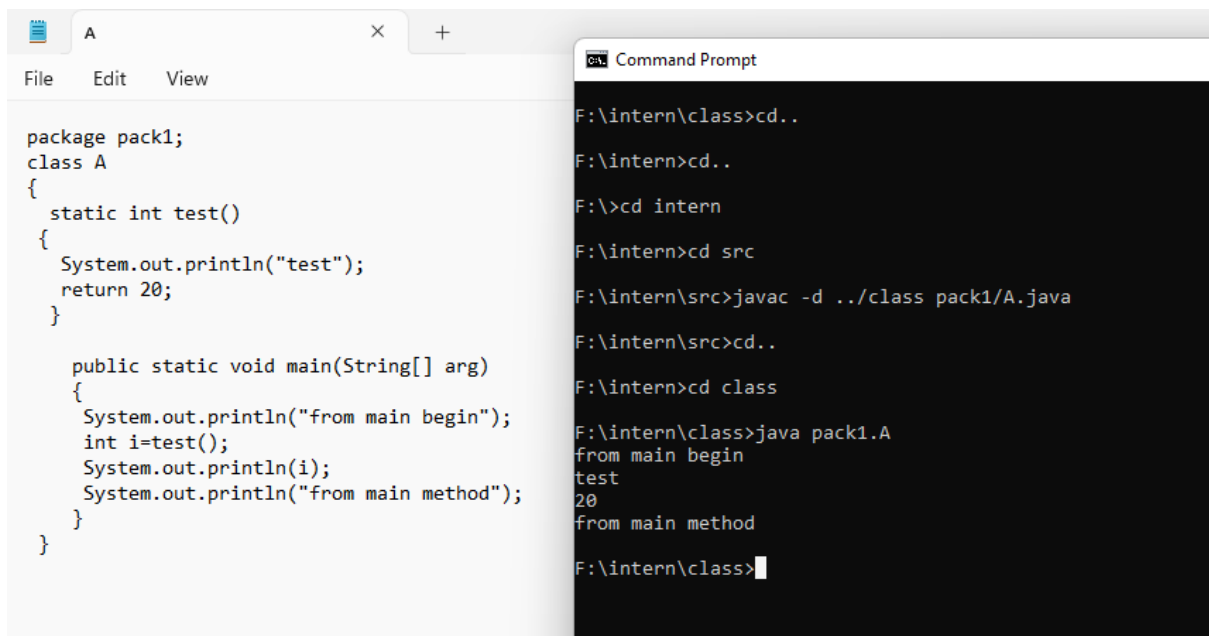
The screenshot shows an IDE window with a file named 'A' containing the following Java code:

```
package pack1;
class A
{
    static int test()
    {
        System.out.println("from test");
        return 10;
    }

    public static void main(String[] arg)
    {
        int i=test();
        int j=10+test();
        System.out.println(test());
        System.out.println(i);
        System.out.println(j);
        System.out.println(i + j +test());
    }
}
```

To the right, a Command Prompt window shows the following commands and output:

```
F:\intern\src>javac -d ../class pack1/A.java
F:\intern\src>cd..
F:\intern>cd class
F:\intern\class>java pack1.A
from test
from test
from test
10
10
20
from test
40
F:\intern\class>
```



The screenshot shows an IDE window with a file named 'A' containing the following Java code:

```
package pack1;
class A
{
    static int test()
    {
        System.out.println("test");
        return 20;
    }

    public static void main(String[] arg)
    {
        System.out.println("from main begin");
        int i=test();
        System.out.println(i);
        System.out.println("from main method");
    }
}
```

To the right, a Command Prompt window shows the following commands and output:

```
F:\intern\class>cd..
F:\intern>cd..
F:\>cd intern
F:\intern>cd src
F:\intern\src>javac -d ../class pack1/A.java
F:\intern\src>cd..
F:\intern>cd class
F:\intern\class>java pack1.A
from main begin
test
20
from main method
F:\intern\class>
```