

MODULE: V

```
String s;  
s = scan.next();
```

```
String s = new String()  
String s = new String("welcome")
```

```
{  
    String s, s1;  
    Scanner scan = new Scanner(  
        System.in);  
    s.o.p("Enter string");  
    s = scan.next();  
    s1 = s.toLowerCase();  
    s.o.p(s);  
    " (s1);  
}
```

```
s ← "A B C D E A B C F G"  
*
```

```
s1 = s.replace('c', '*')
```

```
s ← "ABCxyz"  
s1 = s.trim()  
s1 ← "ABCxyz"
```

```

s1 = scan.next();
s2 = scan.next();
if (s1.equals(s2))
    s.o.p("Same")

```

charAt()

s1 ← "welcome"

s1.charAt(0) w

s1

w	e	l	c	o	m	e
---	---	---	---	---	---	---

compareTo

if (s1.compareTo(s2) == 0)

concat()

~~s3~~ = s1.concat(s2)

s ← "Hello good morning"

s.substring(6)

good morning

s.substring(6, 11) good

s ← "123"

int x

s.valueOf(x)

x = 123

int x = 123;

String s;

s = x.toString();

s ← "123"

s ← "good morning"

s.indexOf('o') → 1

s.indexOf('o', 4) → 6

Applet

local applet

Remote applet

Applets are small Java programs, that are primarily used in Internet computing. They can be transported over the Internet from one computer to another & run using the Applet Viewer or any web browser that supports Java.

An applet, like any application program, can do many things for us. It can perform arithmetic operations, display graphics, play sounds, accept user input, create animation, & play interactive games.

Java has revolutionized the way the Internet users retrieve & use documents on the world wide network. Java has enabled them to create & use fully interactive multimedia web documents. A web page can now contain not only a simple text / static image but also a Java applet which, when run, can produce graphics, sounds & moving images. Java applets \therefore have begun to make a significant impact on the www.

* Local and remote applets:

We can embed applets into web pages in 2 ways:

1. We can write our own applets & embed them into web pages.
2. We can download an applet from a remote computer & then embed it into a web page.

- 1) Local applet - an applet developed locally & stored in a local s/m. It doesn't need to use the Internet & therefore the local s/m doesn't require the Internet connecⁿ. It simply searches the directories in the local s/m & locates & loads the specified applet.

2) Remote applet - It's developed by someone else & stored on a remote computer connected to the internet. If our s/m is connected to the Internet, we can download the remote applet onto our s/m via the Internet & run it.

In order to locate and load a remote applet, we must know the applet's address on the web - URL - Uniform resource locator. The URL must be specified in the applet's HTML document as the value of the ~~codeb~~ CODEBASE attribute.

eg: CODEBASE = <http://www.netscape.com/applets>

In the case of local applets, CODEBASE may be absent & may specify a local directory.

- Difference b/w applets & applications:
Applets are not full-featured applicⁿ pgms. They are usually written to accomplish a small task or a component of a task.

(i) Applets don't use `main()` method for initiating the execuⁿ of the code. Applets, when loaded, automatically call certain methods of Applet

class to start & execute the applet code.

- (ii) Unlike stand-alone applications, applets can't be run independently. They are run from inside a Web page using a special feature known as HTML tag.
- (iii) Applets can't read from / write to the files in the local computer.
- (iv) Applets can't communicate with other servers on the network.
- (v) Applets can't run any pgm. from the local comp.
- (vi) Applets are restricted from using libraries from other languages such as C/C++.

applet → Applet

class ExampleApplet extends Applet

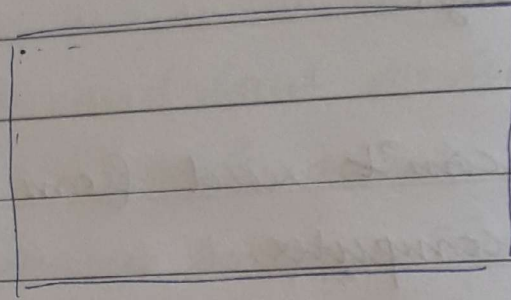
init()
start()
paint()
stop()

```
public void paint ( Graphics g )
```

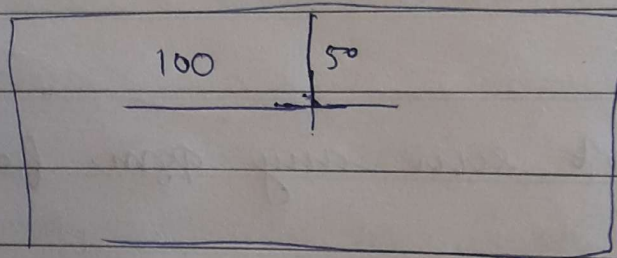
```
drawString ( )
```

```
g.drawString ( col no, no, exp ) color no, no,  
• pixel
```

A



```
g.drawString ( 100, 50, "Hello", 100, 50 )
```



```
import java.awt.*;
```

```
import java.applet.*;
```

```
class SampleJava extends Applet  
{
```

```
public void paint ( Graphics g )  
{
```

```
g.drawString ( "Hello Java", 100, 100 )
```

```
}  
}
```


Design a web page
HTML

< HTML >

< ! —
 —

>

< HEAD >

< TITLE >

Welcome To java Applet

< / TITLE >

< / HEAD >

< BODY >

< APPLET >

* code = Samplejava.class

width = 200

height = 100

< / APPLET >

< / BODY >

< / HTML >

Command Line

Run

String s1, s2

s1 = Text1.getText()
int a, a = Integer.parseInt(s1)

30 8
2