

Day06 (H1)

String
While loop

20150818

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class type

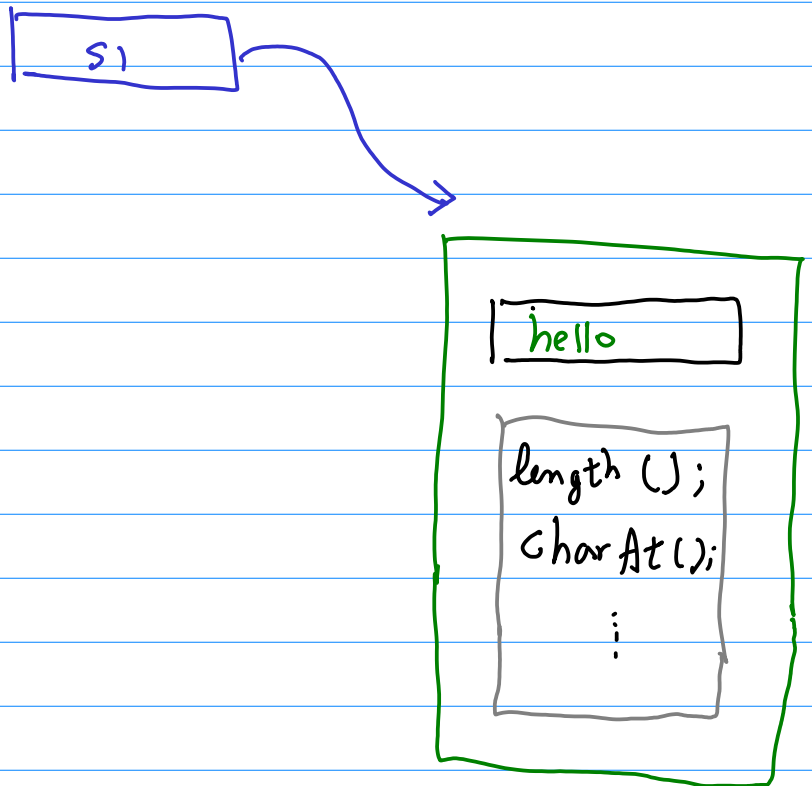
객체 참조 변수

→ Rect

R1;

→ String

s1 = "hello";



```
String s1 = "Hello";  
  
System.out.println( s1 );  
  
System.out.println( s1.length() );  
  
System.out.println( s1.charAt(0) );  
System.out.println( s1.charAt(1) );  
System.out.println( s1.charAt(2) );  
System.out.println( s1.charAt(3) );  
System.out.println( s1.charAt(4) );
```

method

charAt(i)

(i) 번째 인덱스

값은 문자 반환

0	1	2	3	4
H	e	l	l	o

배열

문자열

문자 배열

s2.charAt(0) ⇒ H

s2.charAt(1) ⇒ e

s2.charAt(2) ⇒ l

s2.charAt(3) ⇒ l

s2.charAt(4) ⇒ o

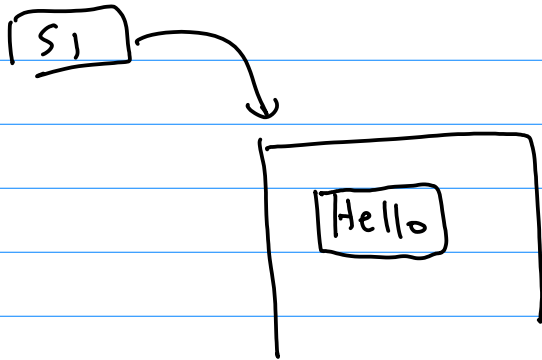
```
String s1 = "Hello";  
System.out.println( s1 );  
System.out.println( s1.length() );
```

```
System.out.println( s1.charAt(0) );  
System.out.println( s1.charAt(1) );  
System.out.println( s1.charAt(2) );  
System.out.println( s1.charAt(3) );  
System.out.println( s1.charAt(4) );
```

$k = 0, 1, 2, 3, 4$

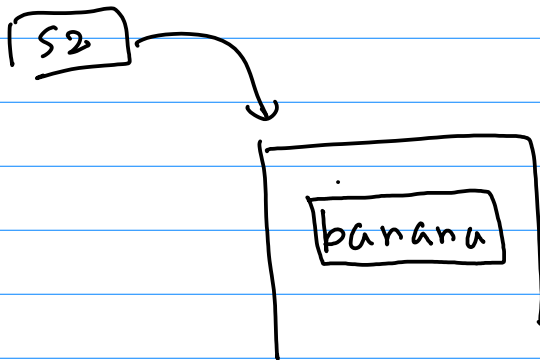
```
int k;  
for (k=0; k<5; ++k) {  
    System.out.print(k + "----> ");  
    System.out.println( s1.charAt(k) );  
}
```

$s1.length() \Rightarrow 5$



0 1 2 3 4 5
↓ ↓ ↓ ↓ ↓
H e l l o

The index 5 is crossed out with a red 'X' and a red arrow points down from it.



0 1 2 3 4 5 6
↓ ↓ ↓ ↓ ↓ ↓
b a n a n a * *

The index 5 is circled in green. A green arrow points from the circled 5 to the index 6. The index 6 is also circled in green. There are two pink asterisks to the right of the string.

$s2.length() \Rightarrow 6$

```
String s2 = "banana";
```

```
k=0; (0) 1, 2, 3, 4, 5  
while ( k < s2.length() ) {  
    k++; → ①, 2, 3, 4, 5, ⑥  
    System.out.print(k + "----> "); | ...→  
    System.out.println( s2.charAt(k) );  
}
```

0	1	2	3	4	5
b	a	n	a	n	a

s2.charAt(0) ⇒ b

s2.charAt(1) ⇒ a

s2.charAt(2) ⇒ n

s2.charAt(3) ⇒ a

s2.charAt(4) ⇒ n

s2.charAt(5) ⇒ a

s2.charAt(6) ⇒ X error!

```
k=0;
while ( k < s2.length() ) {
    System.out.print(k + "-----> ");
    System.out.println( s2.charAt(k) );
    k++;
}
```

k=0, 1, 2, 3, 4, 5

k=1, 2, 3, 4, 5, 6

```
String s2 = "banana";
```

```
k=0;
while ( k < s2.length() ) {
    k++;
    System.out.print((k-1) + "-----> ");
    System.out.println( s2.charAt(k-1) );
}
```

$k++$
 $++k$

$k = k + 1;$

$k += 1$

$k--$
 $--k$

$k = k - 1;$

$k -= 1$

$a += b$
 $a -= b$
 $a *= b$
 $a /= b$

$a = a + b$
 $a = a - b$
 $a = a * b$
 $a = a / b$


```
int a = 10;  
int b = 2;
```

```
a=10; b=2;  
System.out.println("a= " + a + " b= " + b);  
System.out.println("a+=b --> " + (a+=b) );  
System.out.println("a= " + a + " b= " + b);  
System.out.println();
```

```
a=10; b=2;  
System.out.println("a= " + a + " b= " + b);  
System.out.println("a-=b --> " + (a-=b) );  
System.out.println("a= " + a + " b= " + b);  
System.out.println();
```

```
a=10; b=2;  
System.out.println("a= " + a + " b= " + b);  
System.out.println("a*=b --> " + (a*=b) );  
System.out.println("a= " + a + " b= " + b);  
System.out.println();
```

```
a=10; b=2;  
System.out.println("a= " + a + " b= " + b);  
System.out.println("a/=b --> " + (a/=b) );  
System.out.println("a= " + a + " b= " + b);  
System.out.println();
```

```
for ( k = 0 ; k < 5 ; ++k ) ; {  
    System.out.println ( k ) ;  
}
```

```
for ( k = 0 ; k < 5 ; ++k ) ;  
{ System.out.println ( k ) ; }
```