

```
7// For KAY
// Comment
```

```
// Kay is a case-sensitive language (True and False are uppercased)
// You do not need to write programs you can just write tests to test the
// scanner
```

```
// keywords
```

```
bool
```

```
else
```

```
if
```

```
integer
```

```
main
```

```
while
```

```
// separators
```

```
(
```

```
)
```

```
{
```

```
}
```

```
;
```

```
, // comma
```

```
// operators
```

```
||
```

```
!
```

```
&&
```

```
!=
```

```
==
```

```
>=
```

```
<=
```

```
<
```

```
>
```

/
*
-
+
:= // A comment

// identifiers

a
aa
x
counter
a3
do // identifier
void // identifier in kay
true // identifier in kay
false // identifier in kay
X3 // 38
TRUE // identifier

// literals

True
False
0
1
2
3
4
5
6
7
8
9
10

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
100
256
6594
54932
543922
5838323
85403345
393920582
4894309432
58834324234
342894252085
5823943294892
48329483248322

595686866830384
4823980580280508
44820105839845032
432205294320580285

// lexical errors

= // Other - not recognized

3aaa2!=44444 // lexical error for 3aaa2

@ // lexical error Other

& // lexical error

| // lexical error

1!=3 // literal(1) operator (!=) other(=) literal (3)

// Things to test!

1!2 // literal operator literal

1!=2 // literal operator (!=) literal

1! == 3 // literal operator (!) operator (==) literal

1==>4 // literal operator (==) operator (>) literal

** // operator operator

True && False // literal operator literal

// Missing tests

// Lexical errors

2.5 // we do not understand .

:

=

\

[

]

// Identifier

Xy1 // Capital first letter

// tests influenced from other languages

1,000,000 // Literal separator literal separator literal

/* test */ // operator operator identifier operator operator

// Negative numbers

!5 // operator literal

!= // operator(!=) other(=)

// This is not a Kay program but it is good for testing purposes

void main(){

int i;

i = 7;

}

// void identifier

// main keyword

// (separator

//) separator

// { separator

// int identifier

// i identifier

// ; separator

// i identifier

// = other

// 7 literal

// ; separator

// } separator

This is what we put in the file to test:

bool
else
if
integer
main
while

(
)
{
}
;
,

||
!
&&
!=
==
>=
<=
<
>
/
*
-
+
:=

a
aa
x
counter
a3
do
void
true
false
X3
TRUE

True
False
0
1
2
3
4
5
6
7
8
9
10

=
3aaa2!=44444
@
&
|
1!=3

1!2
1!=2
1! == 3
1==>4
**

True && False

```
void main(){  
int i;  
i = 7;  
}
```