Semicolon in AWK

As in many programming languages like Java, the semicolon marks the end of one stateùent and the begin of another one.

```
awke '{print $1 ; print $0}' awk.txt
 >>> AWK
 >>> AWK is awesome
 >>> Let
 >>> Let learn AWK together
 ...
```

The special variable FS

We can put the field separator within an AWK program vy assigning a value to the special variable FS.

```
awk 'BEGIN {FS =","} {print $2}'
 Yellow ,Bl ue,Red
 >>> Blue
```

The special variable RS

By default, AWK treats each line of its input as a separate record. But what if the input line is not devided into lines ? Let take the file OneLine.txt as an example:

```
cat OneLin e.txt
 AWK,is ,aw eso me! Let ,le arn ,AW K!H ell o,AWK
```

In this file, fields are separated by comma and records are separated by exclamation point. Let see the following code which print the second field of each record.

```
awk 'BEGIN {RS="!"; FS= " ,"} {print $2}' OneLine.
txt
 >>> is
 >>> learn
 >>> AWK
```

OFS and ORS

AWK has also the output version of FS and RS which are respectively OFS and ORS. Let take an example using the file names.txt

```
awk 'BEGIN {OFS=", " ;OR S="! "} {print $1,$2}' names.
txt
 >>> Albert ,Ei nst ein !Ba rak ,Ob ama >>! Ste ve ,Jobs
```

Note that the setting of OFS has no effect on the output of $0.

The special variable NR

NR is a special variable whose value is the record number or line number of the record that is currently being examined .

```
awk '{print NR,$0}' awk.txt
 >>> 1 AWK is awesome
 >>> 2 Let learn AWK together
 >>> 3 AWK is used for text processing
```

If we put two input files the result will be the concat-enation of the two files.

The special variable FNR

FNR is a special variable whose value is the record number of each file.

```
awk '{print FNR, $0}' names.txt awk.txt
 >>> 1 Albert Einstein
 >>> 2 Barak Obama
 >>> 3 Steve Jobs
 >>> 1 AWK is awesome
 >>> 2 Let  learn AWK together
 >>> 3 AWK is used for text processing
```

The special variable FILENAME

The special variable FILENAME print the name

```
awk '{print FILENA ME,$0}' names.t
 >>> names.txt Albert Einshtein
 >>> names.txt Barak Obama
 >>> names.txt Steve Jobs
 >>> awk.txt AWK is awesome
 >>> awk.txt Let learn AWK togethe
 >>> awk.txt AWK is used for text
```