More complex examples of AWK

```
# Add up first column, print sum and average:
      { s += $1 }
  END  { print "sum is", s, " average is", s/NR }

# Print fields in reverse order:
  awk '{ for (i = NF; i > 0; --i) print $i }' file


# Print the last line
     {line = $0}
  END {print line}


# Print the total number of lines that contain the word Pat
  /Pat/ {nlines = nlines + 1}
  END {print nlines}


# Print all lines between start/stop pairs:
  awk '/start/, /stop/' file


# Print all lines whose first field is different from previous one:
  awk '$1 != prev { print; prev = $1 }' file


# Count number of lines where col 3 > col 1
  awk '$3 > $1 {print i + "1"; i++}' file


# Print every line after erasing the 2nd field
  awk '{$2 = ""; print}' file

# the field separator is `|` instead of blank
awk -F"|" '$2=="Jones"{print $4}' filename

# using array in AWK
ls –l | awk 'BEGIN{i=1} {array[i]+=$5} END{print array[i]}'

ls –l | awk 'BEGIN{i=1} {array[i]+=$5; i++} END{print i array[i]}'


# Find maximum and minimum values present in column 1
NR == 1 {m=$1 ; p=$1}
$1 >= m {m = $1}
$1 <= p {p = $1}
END { print "Max = " m, "   Min = " p }
```