

# TOPK

This operator calculated a list of top elements regarding a scoring function. Only if the top elements change, an output will be produced. Additionally, the object that triggered the new calculation is send to output

Outputschema is List<TUPLE>, TUPLE

Remark: Use [] or elementAt to access elements in List and in TUPLE

## Parameter:

- scoringFunction [Expression]: An expression that must return a numerical value
- k [Integer]: Number of elements that should be treated
- descending [Boolean]: The standardcase is that the higher the score, the higher the rank. Set to false if the higher the score, the lower the rank.

## Example:

```
PARSER PQL
#ADDQUERY
out = TOPK({
    k = 10,
    scoringfunction = 'price'
},
ELEMENTWINDOW({
    size = 5
},
bid
)
)

out2 = MAP({
    expressions = [
#LOOP i 0 upto 9
    ['elementAt(topk[${i}],1)', 'top_${i+1}_auction'],
    ['elementAt(topk[0],2)', 'top_${i+1}_bidder'],
    ['elementAt(topk[0],4)', 'top_${i+1}_price'],
#ENDLOOP,
    'topk'
    ],
    ALLOWNULL = true,
    SUPPRESSERRORS = true
},
out
)
```