

A mechanical device, possibly a model of a textile machine or a similar industrial mechanism. It features a large yellow spool on the left, a black chain running across the bottom, and a blue component on the right. The background is dark and out of focus.

# Joins and Aggregates - 1

# Joins and Aggregates

**Problem Description -** Compute the top 3 performing News Types



News Type	Total Clicks
Sports	3
Politics	2
Local News	4
Health	1
World News	5
Lifestyle	2
Business	7
Education	11

# Preparing for Sorting

Key	Value
Sports	3
Politics	2
Local News	4
Health	1
World News	5
Lifestyle	2
Business	7
Education	11

GroupBy

Key	Value
ABC	{"NewsType": "Sports", "Clicks": 3}
ABC	{"NewsType": "Politics", "Clicks": 2}
ABC	{"NewsType": "LocalNews", "Clicks": 4}
ABC	{"NewsType": "Health", "Clicks": 1}
ABC	{"NewsType": "WorldNews", "Clicks": 5}
ABC	{"NewsType": "Lifestyle", "Clicks": 2}
ABC	{"NewsType": "Business", "Clicks": 7}
ABC	{"NewsType": "Education", "Clicks": 11}

# Sorting and Top3

## Top 3 Sorted News Types

```
{"NewsType": "Politics", "Clicks": 2}
```

```
{"NewsType": "WorldNews", "Clicks": 2}
```

```
{"NewsType": "LocalNews", "Clicks": 1}
```

```
void add(ClicksByNewsType newValue)
```

```
void remove(ClicksByNewsType oldValue)
```