# reduceByKeyAndWindow()



## reduceByKeyAndWindow

reduceByKeyAndWindow(func, nvFunc, windowDuration, slideDuration=None,

numPartitions=None, filterFunc=None)

- Return a new DStream by applying incremental reduceByKey over a sliding window
- The reduced value of over a new window is calculated using the old window's reduce value

### Example-

- reduce the new values that entered the window (e.g., adding new counts)<<Click>>
- "inverse reduce" the old values that left the window (e.g., subtracting old counts)



## reduceByKeyAndWindow

#### Parameters:

- **function**: associative and commutative reduce function
- invFunction: inverse function of reduceFunc
- windowDuration: width of the window; must be a multiple of this DStream's batching interval
- **slideDurationint(optional):** sliding interval of the window
- numPartitionsint (optional): number of partitions of each RDD in the new DStream
- **filterFunction(optional):** function to filter expired key-value pairs





