package com.twitter.search.core.earlybird.index.inverted;

/\*\*

\* Comparator interface for {@link SkipListContainer},

\* see sample implementation {@link SkipListIntegerComparator}.

\*

\* Notice: less/equal/greater here refer to the order precedence, instead of numerical value.

\*/

public interface SkipListComparator<K> {

/\*\*

\* Determine the order between the given key and the key of the given targetValue.

\* Notice, usually key of a value could be derived from the value along.

\*

\* Implementation of this method should consider sentinel value, see {@link #getSentinelValue()}.

\*

\* Can include position data (primarily for text posting lists). Position should be ignored if

\* the skip list was constructed without positions enabled.

\*

\* @return negative, zero, or positive to indicate if first value is

\* less than, equal to, or greater than the second value, respectively.

\*/

int compareKeyWithValue(K key, int targetValue, int targetPosition);

/\*\*

\* Determine the order of two given values based on their keys.

\* Notice, usually key of a value could be derived from the value along.

\*

\* Implementation of this method should consider sentinel value, see {@link #getSentinelValue()}.

\*

\* @return negative, zero, or positive to indicate if first value is

\* less than, equal to, or greater than the second value, respectively.

\*/

int compareValues(int v1, int v2);

/\*\*

\* Return a sentinel value, sentinel value should be considered by this comparator

\* as an ADVISORY GREATEST value, which should NOT be actually inserted into the skip list.

\*

\* @return the sentinel value.

\*/

int getSentinelValue();

}