
In Section 4.1 the UDFs were incorrectly described for data copartitioning. They should be replaced with the following UDFs:

\[ \text{CoPartition}_{a,b}(T,S) \Rightarrow \]

\[
\begin{align*}
\text{map}(\text{key } k, \text{value } v) & \mapsto \begin{cases} 
\text{[} & \text{(prj}_a(k \oplus v), k \oplus v) \text{]} & \text{if input}(k \oplus v) = T, \\
\text{[} & \text{(prj}_b(k \oplus v), k \oplus v) \text{]} & \text{if input}(k \oplus v) = S.
\end{cases} \\
\text{reduce}(\text{key } ik, vset ivs) & \mapsto \text{[}\{ik\} \times ivs\text{]} 
\end{align*}
\]

For each record in an input split, \texttt{itemize.next()} receives the offset as key and the record as value and map emits \texttt{[joinvalue, record]} as key-value pairs. For re-partitioning, sorting, and grouping the key-value pairs we use the entire key, i.e. we use the default \texttt{sh}, \texttt{cmp}, and \texttt{grp} UDFs. Figure 3(b) should be changed to show the Map Phase outputting \texttt{[joinvalue,record]} accordingly.