## ex2

Find the names of Suppliers who supply some red part and cost less than 100.

$$\prod sname(\prod_{sid}((\sigma_{color=red}Parts))\bowtie(\sigma_{cost<100}Catalog))\bowtie Suppliers)$$

Find the names of Suppliers supplying some red part and cost less than 100 and a Supplier with same name supplying some green part for less than 100.

$$(\prod_{sname} ((\sigma_{color=red} Parts) \bowtie \sigma_{cost < 100} Catalog)) \bowtie Suppliers) \cap (\prod_{sname} ((\sigma_{color=green} Parts) \bowtie (\sigma_{cost < 100} Catalog)) \bowtie Suppliers)$$

Find the sids of Suppliers supplying some red part and cost less than 100  $\,$  and a Supplier with same sid supplying some green part and cost less than 100  $\,$ .

$$(\prod_{sid}((\sigma_{color=red}Parts)\bowtie(\sigma_{cost<100}Catalog))\bowtie Suppliers)\cap\\ (\prod_{sid}((\sigma_{color=green}Parts)\bowtie(\sigma_{cost<100}Catalog)\bowtie Suppliers))$$

Find the names of Suppliers supplying some red part and cost less than 100 and some green part and cost less than 100.

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\begin{array}{l} \prod_{sname}((\prod_{sid,name}((\sigma_{color=red}Parts)\bowtie(\sigma_{cost<100}Catalog))\bowtie\\ Suppliers)\cap(\prod_{sid,name}((\sigma_{color=green})\bowtie(\sigma_{cost<100}Catalog)\bowtie\\ Suppliers))) \end{array}
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