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Q1a) Leftmost derivation

$\langle \text{assign} \rangle \rightarrow \langle \text{id} \rangle = \langle \text{expr} \rangle;$

$\rightarrow \text{Revenue} = \langle \text{expr} \rangle;$

$\rightarrow \text{Revenue} = \langle \text{term} \rangle;$

$\rightarrow \text{Revenue} = \langle \text{term} \rangle * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = \langle \text{factor} \rangle * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\langle \text{expr} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\langle \text{expr} \rangle + \langle \text{term} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\langle \text{term} \rangle + \langle \text{term} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\langle \text{factor} \rangle + \langle \text{term} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\langle \text{id} \rangle + \langle \text{term} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \langle \text{term} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \langle \text{term} \rangle * \langle \text{factor} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \langle \text{factor} \rangle * \langle \text{factor} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \langle \text{id} \rangle * \langle \text{factor} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \text{onlineSale} * \langle \text{factor} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \text{onlineSale} * \langle \text{id} \rangle) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \text{onlineSale} * \text{discountRate}) * \langle \text{factor} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \text{onlineSale} * \text{discountRate}) * \langle \text{id} \rangle;$

$\rightarrow \text{Revenue} = (\text{storeSale} + \text{onlineSale} * \text{discountRate}) * \text{unitPrice};$

Q2b) Parse Tree

