

$$f(x_1, x_2) = e^{x_2}(x_1^2 - x_1/x_2)$$

For function f - Draw the computation graph, Fill in the blanks for the forward pass AD and reverse pass AD tables at $(x_1, x_2) = (1, 2)$

Part 1 - Computation Graph

Forward Primal Trace

v_{-1}	$= x_1$	$= 1$
v_0	$= x_2$	$= 2$
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v_1	$= e^{v_0}$	$= 7.389$
v_2	$= v_{-1}^2$	$= 1$
v_3	$= \frac{v_{-1}}{v_0}$	$= 0.5$
v_4	$= v_2 - v_3$	$= 0.5$
v_5	$= v_4 v_1$	$= 3.694$
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y	$= v_5$	$= 3.694$

Part 2 - Forward Tangent Trace (Find $\frac{\partial f}{\partial x_1}$)

\dot{v}_{-1}	$=$	$= 1$
\dot{v}_0	$=$	$=$
<hr/>		
\dot{v}_1	$=$	$=$
\dot{v}_2	$=$	$=$
\dot{v}_3	$=$	$=$
\dot{v}_4	$=$	$=$
\dot{v}_5	$=$	$=$
<hr/>		
\dot{y}	$=$	$=$

Part 3 - Reverse Adjoint Trace

\bar{v}_{-1}	$=$	$=$
\bar{v}_0	$=$	$=$
<hr/>		
\bar{v}_1	$=$	$=$
\bar{v}_2	$=$	$=$
\bar{v}_3	$=$	$=$
\bar{v}_4	$=$	$=$
<hr/>		
\bar{v}_5	$=$	$= 1$