

The diagram illustrates a hierarchical tree structure, likely representing a sequence of operations or a data flow. The nodes are labeled with mathematical expressions involving x and y and subscripts. The edges are labeled with x and y and subscripts. The structure is organized into several rows and columns, with a central vertical axis and branching structures on either side.

The top row shows a single node $x_{1,1}$ branching into two nodes $x_{2,1}$ and $x_{2,2}$. The second row shows $x_{2,1}$ branching into $x_{3,1}$ and $x_{3,2}$, and $x_{2,2}$ branching into $x_{3,3}$ and $x_{3,4}$. The third row shows $x_{3,1}$ branching into $x_{4,1}$ and $x_{4,2}$, $x_{3,2}$ branching into $x_{4,3}$ and $x_{4,4}$, $x_{3,3}$ branching into $x_{4,5}$ and $x_{4,6}$, and $x_{3,4}$ branching into $x_{4,7}$ and $x_{4,8}$. The fourth row shows $x_{4,1}$ branching into $x_{5,1}$ and $x_{5,2}$, $x_{4,2}$ branching into $x_{5,3}$ and $x_{5,4}$, $x_{4,3}$ branching into $x_{5,5}$ and $x_{5,6}$, $x_{4,4}$ branching into $x_{5,7}$ and $x_{5,8}$, $x_{4,5}$ branching into $x_{5,9}$ and $x_{5,10}$, $x_{4,6}$ branching into $x_{5,11}$ and $x_{5,12}$, $x_{4,7}$ branching into $x_{5,13}$ and $x_{5,14}$, and $x_{4,8}$ branching into $x_{5,15}$ and $x_{5,16}$. The fifth row shows $x_{5,1}$ branching into $x_{6,1}$ and $x_{6,2}$, $x_{5,2}$ branching into $x_{6,3}$ and $x_{6,4}$, $x_{5,3}$ branching into $x_{6,5}$ and $x_{6,6}$, $x_{5,4}$ branching into $x_{6,7}$ and $x_{6,8}$, $x_{5,5}$ branching into $x_{6,9}$ and $x_{6,10}$, $x_{5,6}$ branching into $x_{6,11}$ and $x_{6,12}$, $x_{5,7}$ branching into $x_{6,13}$ and $x_{6,14}$, $x_{5,8}$ branching into $x_{6,15}$ and $x_{6,16}$, $x_{5,9}$ branching into $x_{6,17}$ and $x_{6,18}$, $x_{5,10}$ branching into $x_{6,19}$ and $x_{6,20}$, $x_{5,11}$ branching into $x_{6,21}$ and $x_{6,22}$, $x_{5,12}$ branching into $x_{6,23}$ and $x_{6,24}$, $x_{5,13}$ branching into $x_{6,25}$ and $x_{6,26}$, $x_{5,14}$ branching into $x_{6,27}$ and $x_{6,28}$, $x_{5,15}$ branching into $x_{6,29}$ and $x_{6,30}$, and $x_{5,16}$ branching into $x_{6,31}$ and $x_{6,32}$. The sixth row shows $x_{6,1}$ branching into $x_{7,1}$ and $x_{7,2}$, $x_{6,2}$ branching into $x_{7,3}$ and $x_{7,4}$, $x_{6,3}$ branching into $x_{7,5}$ and $x_{7,6}$, $x_{6,4}$ branching into $x_{7,7}$ and $x_{7,8}$, $x_{6,5}$ branching into $x_{7,9}$ and $x_{7,10}$, $x_{6,6}$ branching into $x_{7,11}$ and $x_{7,12}$, $x_{6,7}$ branching into $x_{7,13}$ and $x_{7,14}$, $x_{6,8}$ branching into $x_{7,15}$ and $x_{7,16}$, $x_{6,9}$ branching into $x_{7,17}$ and $x_{7,18}$, $x_{6,10}$ branching into $x_{7,19}$ and $x_{7,20}$, $x_{6,11}$ branching into $x_{7,21}$ and $x_{7,22}$, $x_{6,12}$ branching into $x_{7,23}$ and $x_{7,24}$, $x_{6,13}$ branching into $x_{7,25}$ and $x_{7,26}$, $x_{6,14}$ branching into $x_{7,27}$ and $x_{7,28}$, $x_{6,15}$ branching into $x_{7,29}$ and $x_{7,30}$, $x_{6,16}$ branching into $x_{7,31}$ and $x_{7,32}$, $x_{6,17}$ branching into $x_{7,33}$ and $x_{7,34}$, $x_{6,18}$ branching into $x_{7,35}$ and $x_{7,36}$, $x_{6,19}$ branching into $x_{7,37}$ and $x_{7,38}$, $x_{6,20}$ branching into $x_{7,39}$ and $x_{7,40}$, $x_{6,21}$ branching into $x_{7,41}$ and $x_{7,42}$, $x_{6,22}$ branching into $x_{7,43}$ and $x_{7,44}$, $x_{6,23}$ branching into $x_{7,45}$ and $x_{7,46}$, $x_{6,24}$ branching into $x_{7,47}$ and $x_{7,48}$, $x_{6,25}$ branching into $x_{7,49}$ and $x_{7,50}$, $x_{6,26}$ branching into $x_{7,51}$ and $x_{7,52}$, $x_{6,27}$ branching into $x_{7,53}$ and $x_{7,54}$, $x_{6,28}$ branching into $x_{7,55}$ and $x_{7,56}$, $x_{6,29}$ branching into $x_{7,57}$ and $x_{7,58}$, $x_{6,30}$ branching into $x_{7,59}$ and $x_{7,60}$, $x_{6,31}$ branching into $x_{7,61}$ and $x_{7,62}$, and $x_{6,32}$ branching into $x_{7,63}$ and $x_{7,64}$. The seventh row shows $x_{7,1}$ branching into $x_{8,1}$ and $x_{8,2}$, $x_{7,2}$ branching into $x_{8,3}$ and $x_{8,4}$, $x_{7,3}$ branching into $x_{8,5}$ and $x_{8,6}$, $x_{7,4}$ branching into $x_{8,7}$ and $x_{8,8}$, $x_{7,5}$ branching into $x_{8,9}$ and $x_{8,10}$, $x_{7,6}$ branching into $x_{8,11}$ and $x_{8,12}$, $x_{7,7}$ branching into $x_{8,13}$ and $x_{8,14}$, $x_{7,8}$ branching into $x_{8,15}$ and $x_{8,16}$, $x_{7,9}$ branching into $x_{8,17}$ and $x_{8,18}$, $x_{7,10}$ branching into $x_{8,19}$ and $x_{8,20}$, $x_{7,11}$ branching into $x_{8,21}$ and $x_{8,22}$, $x_{7,12}$ branching into $x_{8,23}$ and $x_{8,24}$, $x_{7,13}$ branching into $x_{8,25}$ and $x_{8,26}$, $x_{7,14}$ branching into $x_{8,27}$ and $x_{8,28}$, $x_{7,15}$ branching into $x_{8,29}$ and $x_{8,30}$, $x_{7,16}$ branching into $x_{8,31}$ and $x_{8,32}$, $x_{7,17}$ branching into $x_{8,33}$ and $x_{8,34}$, $x_{7,18}$ branching into $x_{8,35}$ and $x_{8,36}$, $x_{7,19}$ branching into $x_{8,37}$ and $x_{8,38}$, $x_{7,20}$ branching into $x_{8,39}$ and $x_{8,40}$, $x_{7,21}$ branching into $x_{8,41}$ and $x_{8,42}$, $x_{7,22}$ branching into $x_{8,43}$ and $x_{8,44}$, $x_{7,23}$ branching into $x_{8,45}$ and $x_{8,46}$, $x_{7,24}$ branching into $x_{8,47}$ and $x_{8,48}$, $x_{7,25}$ branching into $x_{8,49}$ and $x_{8,50}$, $x_{7,26}$ branching into $x_{8,51}$ and $x_{8,52}$, $x_{7,27}$ branching into $x_{8,53}$ and $x_{8,54}$, $x_{7,28}$ branching into $x_{8,55}$ and $x_{8,56}$, $x_{7,29}$ branching into $x_{8,57}$ and $x_{8,58}$, $x_{7,30}$ branching into $x_{8,59}$ and $x_{8,60}$, $x_{7,31}$ branching into $x_{8,61}$ and $x_{8,62}$, $x_{7,32}$ branching into $x_{8,63}$ and $x_{8,64}$, $x_{7,33}$ branching into $x_{8,65}$ and $x_{8,66}$, $x_{7,34}$ branching into $x_{8,67}$ and $x_{8,68}$, $x_{7,35}$ branching into $x_{8,69}$ and $x_{8,70}$, $x_{7,36}$ branching into $x_{8,71}$ and $x_{8,72}$, $x_{7,37}$ branching into $x_{8,73}$ and $x_{8,74}$, $x_{7,38}$ branching into $x_{8,75}$ and $x_{8,76}$, $x_{7,39}$ branching into $x_{8,77}$ and $x_{8,78}$, $x_{7,40}$ branching into $x_{8,79}$ and $x_{8,80}$, $x_{7,41}$ branching into $x_{8,81}$ and $x_{8,82}$, $x_{7,42}$ branching into $x_{8,83}$ and $x_{8,84}$, $x_{7,43}$ branching into $x_{8,85}$ and $x_{8,86}$, $x_{7,44}$ branching into $x_{8,87}$ and $x_{8,88}$, $x_{7,45}$ branching into $x_{8,89}$ and $x_{8,90}$, $x_{7,46}$ branching into $x_{8,91}$ and $x_{8,92}$, $x_{7,47}$ branching into $x_{8,93}$ and $x_{8,94}$, $x_{7,48}$ branching