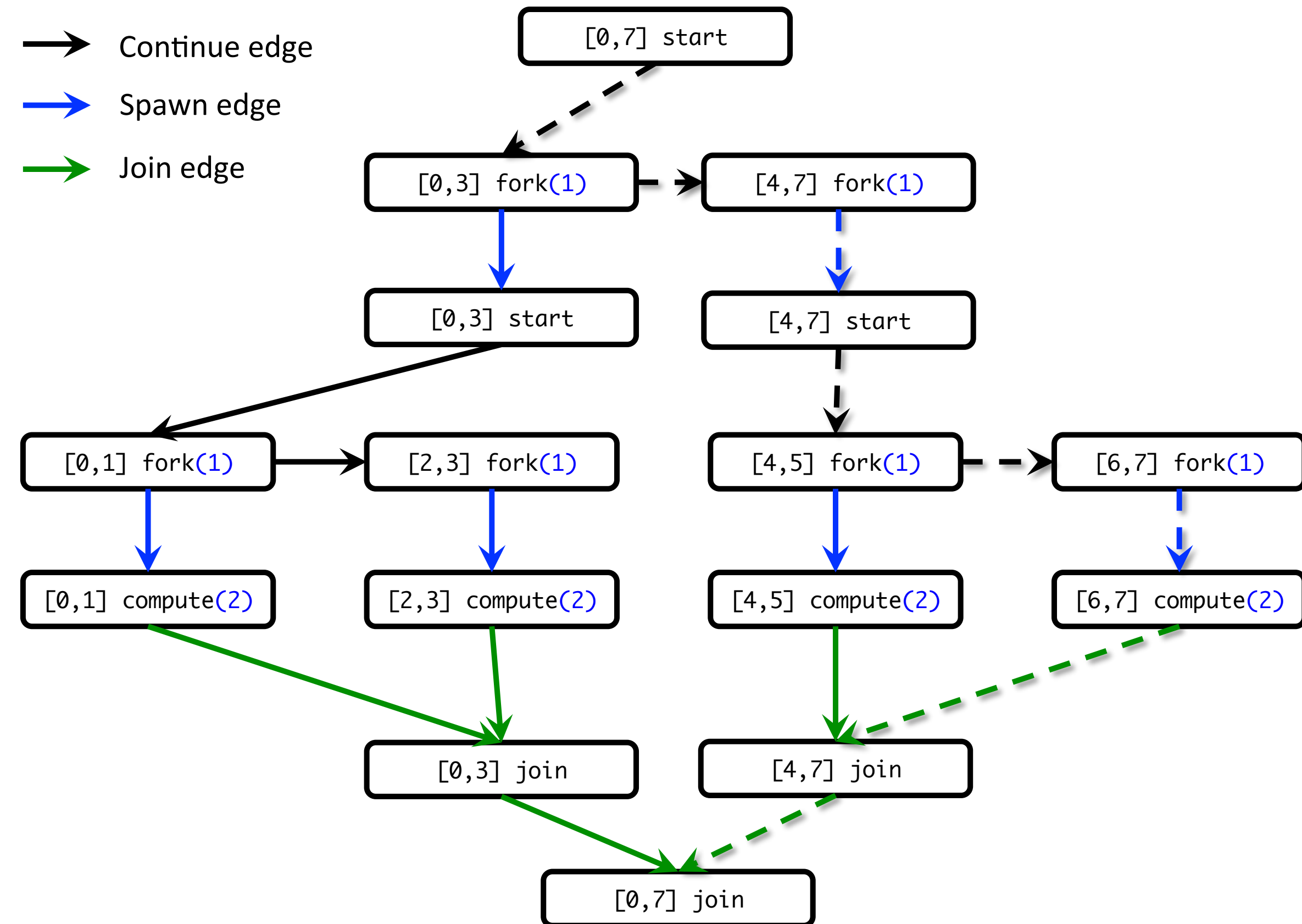


Worksheet solution: RecursiveAction Computation Graph

1) Consider the compute method on slide 8. Let us suppose we supply it with an 8 element array with values [0,1,2,3,4,5,6,7] and THRESHOLD value of 2. Draw a computation graph corresponding to a call to compute with the appropriate fork and join edges.

2) Define each direct (sequential) computation as 2 units of work and each recursive call as one unit of work. What is the total work? What is the critical path length?



TOTAL WORK = 14, CPL = 4 or 6 (depends on how recursive call is counted)

NOTE: each call to compute() takes 2 units because THRESHOLD = 2

