

OS Lab 9 Report

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The approach 0 is flawed because the left fork is picked up even if the right fork is not free. This left fork will not be kept down unless the philosopher get the right fork and then keeps both of them down. Since there are equal number of forks as the philosopher, not all philosopher can have 2 forks. If all the philosophers pick up one fork each, none of them will be keeping down any forks and hence there will be deadlock. To prevent this it should be checked if both forks are free and then both forks picked up together.

Note: In the outputs for dining0, I have printed on each fork pickup so that the deadlock can be better visualised. On the deadlock, each philosopher will have one fork (left fork in my case because I have picked left fork first in the threads).