1. The instructions below are run through the floating-point MIPS pipeline above. Show the timing of this instruction sequence with forwarding.

```
loop:  ld  $f0, 0($s2)
       ld  $f4, 0($s3)
       multd $f0, $f0, $f4
       addd $f2, $f0, $f2
       sd  $f2, 0($s2)
       addi $s2, $s2, 8
       addi $s3, $s3, 8
       stl  $t0, $s3, 128
       bne  $t0, 0, loop
```

2. Find a code sequence for the above pipeline that will cause a structural hazard.
3. There are many stalls in the above solution. Unroll the loop to minimize stalls.