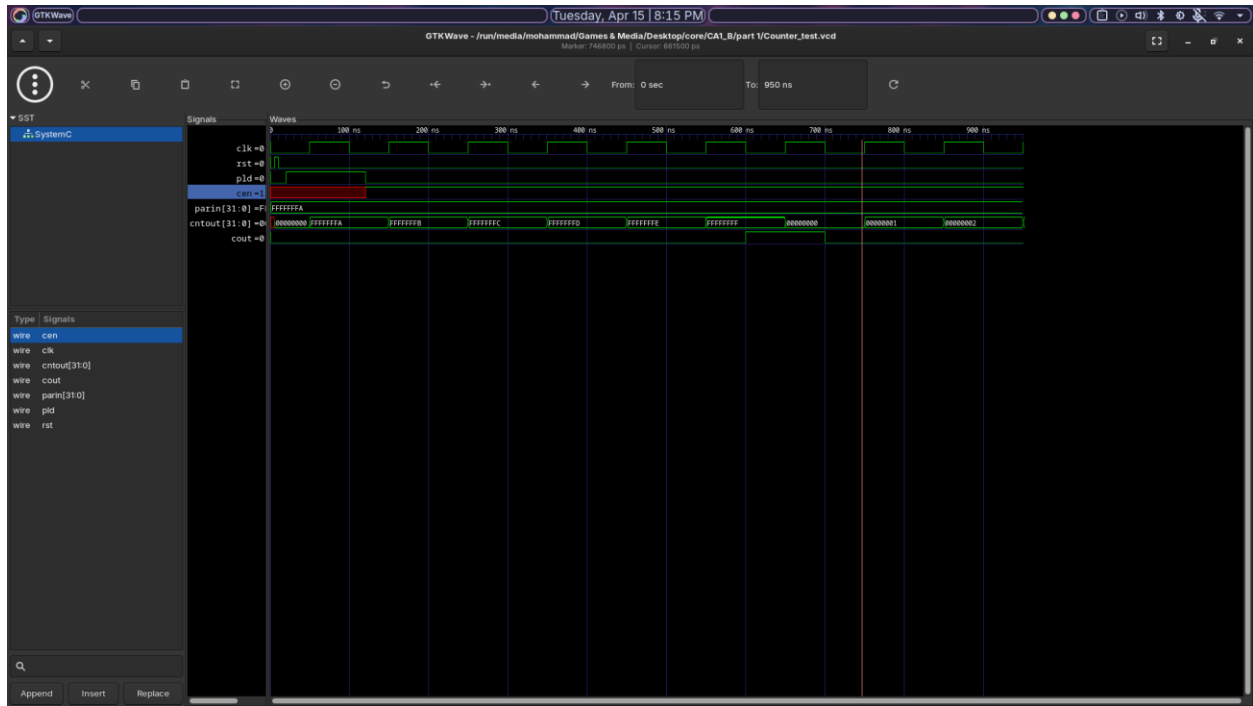


In the name of God

Core-Based Embedded System Design

Mohammad Yahyapour
CA1
Part B

Part 1

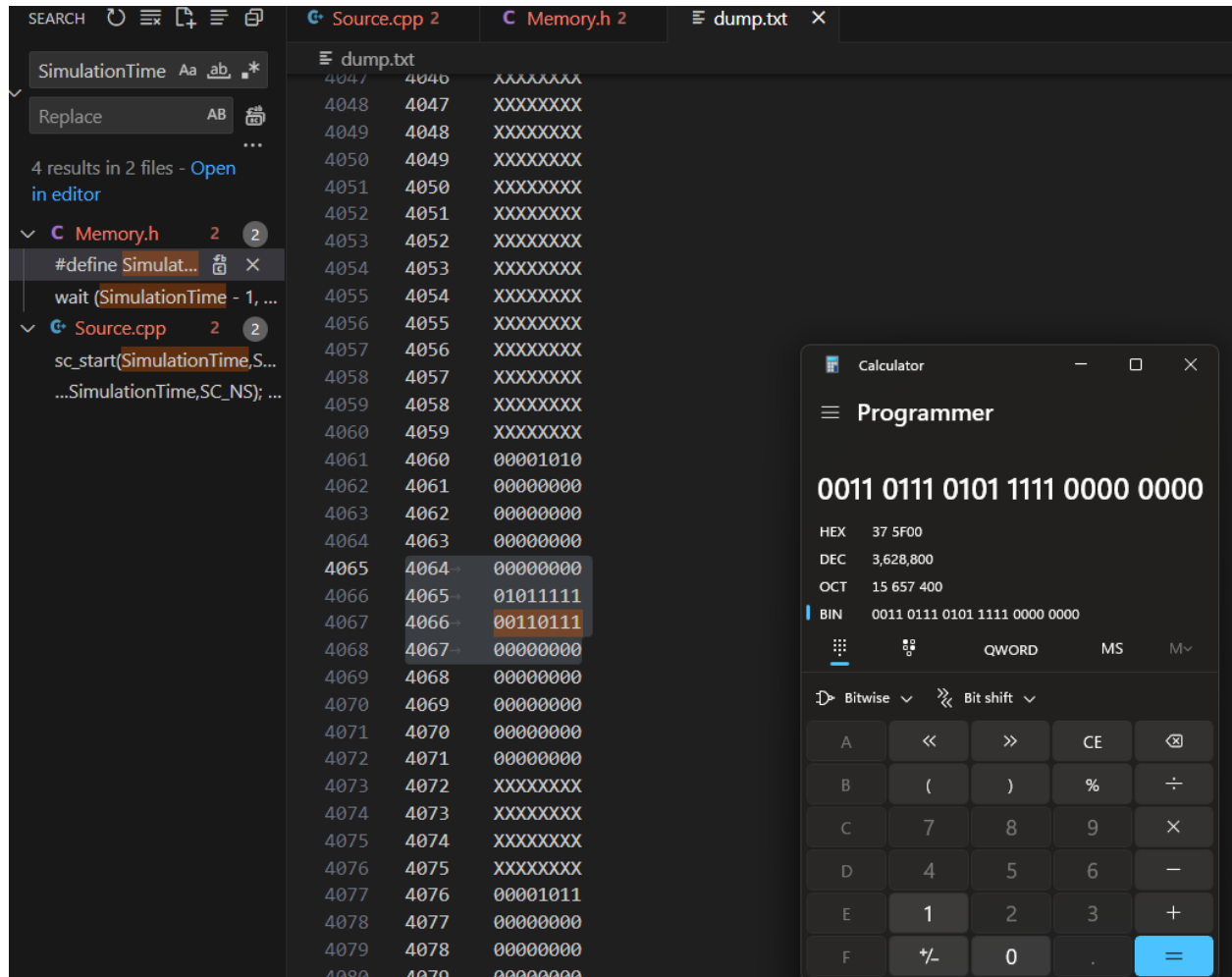


Part 2

```
!!! RF[14] = 40320
!!! RF[14] = 40320
!!! RF[14] = 10
!!! RF[14] = 10
!!! RF[14] = 10
!!! RF[14] = 362880
!!! RF[14] = 362880
!!! RF[14] = 362880
!!! RF[14] = 362880
!!! RF[14] = 362880
!!! RF[14] = 362880
!!! RF[14] = 362880
!!! RF[14] = 11
!!! RF[14] = 11
!!! RF[14] = 11
!!! RF[14] = 11
!!! RF[14] = 3628800
!!! RF[14] = 3628800
!!! RF[14] = 3628800
!!! RF[14] = 3628800
!!! RF[14] = 3628800
!!! RF[14] = 3628800
!!! RF[14] = 3628800
Inst Not Found 4294967295
free(): invalid pointer
Aborted (core dumped)

### PC = 80 Cycle : 1401 & Time: 7300###
### PC = 84 Cycle : 1474 & Time: 7370###
### PC = 88 Cycle : 1487 & Time: 7435###
### PC = 92 Cycle : 1500 & Time: 7500###
### PC = 56 Cycle : 1508 & Time: 7540###
### PC = 60 Cycle : 1521 & Time: 7605###
### PC = 64 Cycle : 1534 & Time: 7670###
### PC = 68 Cycle : 1575 & Time: 7875###
### PC = 72 Cycle : 1588 & Time: 7940###
### PC = 76 Cycle : 1601 & Time: 8005###
### PC = 80 Cycle : 1609 & Time: 8045###
### PC = 84 Cycle : 1622 & Time: 8110###
### PC = 88 Cycle : 1635 & Time: 8175###
### PC = 92 Cycle : 1648 & Time: 8240###
### PC = 96 Cycle : 1656 & Time: 8280###
### PC = 100 Cycle : 1669 & Time: 8345###
### PC = 104 Cycle : 1682 & Time: 8410###
### PC = 108 Cycle : 1695 & Time: 8475###
### PC = 112 Cycle : 1703 & Time: 8515###
### PC = 116 Cycle : 1711 & Time: 8555###
### PC = 120 Cycle : 1724 & Time: 8620###
### PC = 124 Cycle : 1737 & Time: 8685###
```

Online gcc



Local gcc

```

!!! RF[14] = 10      ### PC = 820 Cycle : 4393 & Time: 21965###
!!! RF[14] = 10      ### PC = 824 Cycle : 4406 & Time: 22030###
!!! RF[14] = 10      ### PC = 828 Cycle : 4419 & Time: 22095###
!!! RF[14] = 10      ### PC = 832 Cycle : 4432 & Time: 22160###
!!! RF[14] = 10      ### PC = 836 Cycle : 4445 & Time: 22225###
!!! RF[14] = 10      ### PC = 840 Cycle : 4453 & Time: 22265###
!!! RF[14] = 10      ### PC = 844 Cycle : 4466 & Time: 22330###
!!! RF[14] = 10      ### PC = 848 Cycle : 4479 & Time: 22395###
!!! RF[14] = 10      ### PC = 852 Cycle : 4492 & Time: 22460###
!!! RF[14] = 10      ### PC = 856 Cycle : 4500 & Time: 22500###
!!! RF[14] = 10      ### PC = 860 Cycle : 4508 & Time: 22540###
!!! RF[14] = 10      ### PC = 864 Cycle : 4516 & Time: 22580###
!!! RF[14] = 10      ### PC = 868 Cycle : 4529 & Time: 22645###
!!! RF[14] = 10      ### PC = 872 Cycle : 4542 & Time: 22710###
!!! RF[14] = 10      ### PC = 876 Cycle : 4550 & Time: 22750###
!!! RF[14] = 10      ### PC = 476 Cycle : 4558 & Time: 22790###
!!! RF[14] = 10      ### PC = 476 Cycle : 4566 & Time: 22830###
!!! RF[14] = 10      ### PC = 476 Cycle : 4574 & Time: 22870###
!!! RF[14] = 10      ### PC = 476 Cycle : 4582 & Time: 22910###
!!! RF[14] = 10      ### PC = 476 Cycle : 4590 & Time: 22950###
!!! RF[14] = 10      ### PC = 476 Cycle : 4598 & Time: 22990###
!!! RF[14] = 10      ### PC = 476 Cycle : 4606 & Time: 23030###
!!! RF[14] = 10      ### PC = 476 Cycle : 4614 & Time: 23070###
!!! RF[14] = 10      ### PC = 476 Cycle : 4622 & Time: 23110###
!!! RF[14] = 10      ### PC = 476 Cycle : 4630 & Time: 23150###
!!! RF[14] = 10      ### PC = 476 Cycle : 4638 & Time: 23190###

```

local gcc

online gcc execution time: 8685 ns

local gcc execution time: 22790 ns