## Report Outline – Phase 1

1. Design Approach

-Paragraph summarizing

-List each component and include block-diagrams or architecture

Memory System

[paragraph]

Driver

[paragraph]

Loader

[paragraph]

Scheduler

[paragraph]

Dispatcher

[paragraph]

Memory/RAM

[paragraph]

Effective-Address

[paragraph]

Fetch

[paragraph]

Decoder

[paragraph]

Executer

[paragraph]

CPU

[paragraph about DMA-Channel]

[paragraph about ComputeOnly]

1. Discuss Implementation Modules (?)
2. Discuss Simulation Itself, Including Code (code is to be submitted on memory stick or CD)
3. Discuss Data Results (in tables or listed)

Part 1

Execute the set of given processes (30) and measure the following:

1. Waiting and completion times for each job; and the averages of both

|  |  |  |  |
| --- | --- | --- | --- |
| **Job** | **OPCD** | **Wait Time** | **Completion Time** |
| 1 | 00 |  |  |
| 2 | 01 |  |  |
| 3 | 02 |  |  |
| 4 | 03 |  |  |
| 5 | 04 |  |  |
| 6 | 05 |  |  |
| 7 | 06 |  |  |
| 8 | 07 |  |  |
| 9 | 08 |  |  |
| 10 | 09 |  |  |
| 11 | 0A |  |  |
| 12 | 0B |  |  |
| 13 | 0C |  |  |
| 14 | 0D |  |  |
| 15 | 0E |  |  |
| 16 | 0F |  |  |
| 17 | 10 |  |  |
| 18 | 11 |  |  |
| 19 | 12 |  |  |
| 20 | 13 |  |  |
| 21 | 14 |  |  |
| 22 | 15 |  |  |
| 23 | 16 |  |  |
| 24 | 17 |  |  |
| 25 | 18 |  |  |
| 26 | 19 |  |  |
| 27 | 1A |  |  |

Average wait time =   
Average completion time =

1. Number of I/O operations each process made

|  |  |
| --- | --- |
| **Job** | **Number of I/O Operations** |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
| 21 |  |
| 22 |  |
| 23 |  |
| 24 |  |
| 25 |  |
| 26 |  |
| 27 |  |

1. Percentage of RAM space used and cache used

[is this per process or just in general?]

1. Measure and compare the above performance metrics for FIFO and Priority (non-preemptive) scheduling policies

[maybe this column can be added to the existing tables]

Part 2

1. Waiting and completion times for jobs assigned to each CPU; and the averages of both

2. Number of I/O each process made

3. Which jobs and percentages of jobs assigned to each CPU; RAM space used and cache used per CPU

4. Measure, compare, and discuss the performance metrics for 1-CPU and N-CPU runs

1. Conclusions/Summary of Findings