

# Operating System 실습

## [HW#2]

## Homework #2

- 주제 : Process Scheduling Simulator
- 제출물 :
  - 보고서(프로그램 소스, 주석, 실행 결과)
  - 프로그램 소스
- Due date : 2014.05.02     24:00까지
- 강의홈페이지 제출

## Homework #2

- Process Scheduling Simulator
  - FCFS Scheduling algorithms
  - SJF Scheduling (Non-Preemptive)
  - Priority Scheduling
  - Round-Robin Scheduling

## Homework #2

### ■ Process Scheduling Simulator

- Millisecond 단위 / context switch 시간은 무시
- 프로세스 4개 기준
- 각 스케줄링 알고리즘에 대한 waiting 시간 출력 및 Gantt Chart 출력

```
Gantt Chart
0      5      10     15     20     25     30
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 3 3 3

Process 1 waiting time = 0 sec
Process 2 waiting time = 24 sec
Process 3 waiting time = 27 sec
Average waiting time = 17 sec
```

## Homework #2

- Process Scheduling Simulator
  - 입력 형식 (data file)

Process 갯수	4		
Process id	1	24	3
	2	3	2
	3	3	4
	4	5	1
	Burst Time	Priority	

## Homework #2

### ■ Process Scheduling Simulator

- struct process

- 실행 형식

\* ./filename [data filename] [scheduling policy]

```
Gantt Chart
0      5      10     15     20     25      30
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 3 3 3

Process 1 waiting time = 0 sec
Process 2 waiting time = 24 sec
Process 3 waiting time = 27 sec
Average waiting time = 17 sec
```