

Presentation Week 1

Dawit Tsigie

Cornell College

03 December 2015

Stats Calculation

Presentation
Week 1

Dawit Tsigie

```
while(np != NULL){  
    totalServiceTime += np->processPointer->  
        serviceTime;  
    totalInterarrivalTime += np->  
        processPointer->interarrivalTime;  
    if(np->pointerToNextNode == NULL){  
        maxWaitTime = np->processPointer->  
            serviceStartTime ;  
        totalWaitTime += np->processPointer->  
            serviceStartTime ;  
    }  
    else {  
        // np->processPointer->serviceStartTime =  
        fmax(np->processPointer->arrivalTime ,  
            np->pointerToNextNode->processPointer->se  
        maxWaitTime = fmax(np->processPointer->se  
            - np->processPointer->arrivalTime, maxV
```

FCFS(50 processes)

Presentation
Week 1

Dawit Tsigie

Mean Service Time = 1.759322

Mean Interarrival Time = 2.530883

Mean Wait Time = 5.686991

Max Wait Time = 19.837469

Total Service Time = 87.966107

SJF Scheduling Algorithm

Presentation

Week 1

Dawit Tsigie

- Used 2 queues and 1 priority queue

```
double elapsedTime = 0.0;
while( !isPriorityQueueEmpty(pq) ) {
    ProcessPointer pp = pqDequeue( pq );
    pp->interarrivalTime = exponentialRandom();
    elapsedTime += pp->interarrivalTime;
    pp->arrivalTime = elapsedTime;
    enqueue(qp, pp);
}
```

SJF VS FCF Scheduling Algorithm

Presentation
Week 1

Dawit Tsigie

FCF

Mean Wait Time = 6.824055

Max Wait Time = 20.746983

SJF

Mean Wait Time = 2.722468

Max Wait Time = 22.349898

THE END!!!