Algorithm

t	CPU	Ready

1. Scheduling

FCFS : serve by arriving order

(SJF) Shortest job first : serve by burst time

(preemptive version of SJF)

(SRT) Shortest Remaining Time. serve by remaining burst time

Priority : serve by priority

Round Robin : serve with time slot, after time slot, stop serving.

Multi-level queue scheduling : higher priority queue stop after no queue
if queue later, come back to higher priority queu

2. Contiguous Memory Allocation

First fit : fit into the first available segment.

Best fit : fit into the smallest available segment

Worst fit : fit into the biggest available segment.

3. Page Replacement (if same, copy)

FIFO replace number copied from most time, if same, copy

LRU replace number that is most far away in the list before

OPT replace number that is most far away in the list after

4. Banker's algorithm

Process	Work	All	Need	W+A

Max - Allocation = need

Work [0] = Available

Find process that need < work

Work [i] = Work [i-1] + Allocation [i-1]

Bash shell Script

first line "#! bin/bash"

$(str)

#! interpret line in script

-eq(==) -ne(!=) -gt(>) -ge(>=) -lt(<) -le(<=)

-a(&&) -o(||) !

```
e.g. If [$score -ge 85 -a $sore -le 100]; then
        echo ....
     elif [$score -ge 70]; then
        echo...
     else
        echo ...
     fi
```

For loop

```
    for course in ${courselise[*]};do
        .....
    done
```

while loop

```
  while [$ctr -le $num]; do
       let sum=sum+ctr
       echo $ctr
       let ctr++
  done.
```

until loop

```
  until [$str -gt $num]; do
       let sum=sum+ctr
       echo $ctr
       let ctr++
  done
```

grep from file

```
list=(`grep $1 trans*.txt | grep $2`)
```

variable $*/$@ all argument

$1 number of positional parameter