Final

Yuao

CPU scheduling algorithm

Non-Preemptive	Preemptive
FIFO	Round Robin

Assumption

1. run on one processor
2. job: print strings

SJF | SRJF

How OS can estimate or know the job length

FIFO

```c
#include<stdio.h>


int main(int argc, char *argv[])
{
    for(int i=1; i<argc; i++) {
        printf("job %d printing %s\n", i, argv[i]);
    }
}
```


```
job 1 printing as
job 2 printing sa
job 3 printing dghk
```

RR

```
int *ptr = (int *) malloc (job_num * sizeof (int));
int run = 0;
for (int i = 0; i < job_num; i++)
  {
    ptr[i] = 0;
  }
int i = 0;
while (run < job_num)
  {
    if (ptr[i % job_num] == -1)
  {
    continue;
  }
    char c = argv[i % job_num + 1][ptr[i % job_num]];
    ptr[i % job_num]++;
    if (c != '\0')
  {
    printf ("job %d printing %c\n", i % job_num, c);
  }
    else
  {
    ptr[i % job_num] = -1;
    run++;
  }
    i++;
```

```
job 0 printing a
job 1 printing s
job 2 printing d
job 0 printing s
job 1 printing a
job 2 printing g
job 2 printing h
```