

OS project1 report

第六組

1. 設計

Sort processes in RT if two processes have same RT then compare their id.

We can't get time with resolution of nanosecond. The resolution of time is microsecond. Therefore; the start time of all processes FIFO_1 are the same.

2. 執行範例測資的結果

FIFO_1

```
[18632.570782] [project1] 29796 1526407858.499512 1526407859.740346
[18633.861505] [project1] 29797 1526407858.499512 1526407861.32100
[18635.233573] [project1] 29798 1526407858.499512 1526407862.405271
[18636.526460] [project1] 29799 1526407858.499512 1526407863.699194
[18637.810470] [project1] 29800 1526407858.499512 1526407864.984241
```

FIFO_2

```
P1 30111 [21690.390663] [project1] 30111 1526410699.549142 1526410920.20305
P2 30112 [21703.794005] [project1] 30112 1526410699.800157 1526410933.433812
P3 30113 [21706.497437] [project1] 30113 1526410700.49367 1526410936.140032
P4 30114 [21709.143019] [project1] 30114 1526410700.300053 1526410938.787746
```

FIFO_3

```
[19148.571400] [project1] 29885 1526408354.154776 1526408376.156044
[19162.558621] [project1] 29886 1526408354.669106 1526408390.154571
[19170.612384] [project1] 29887 1526408354.924122 1526408398.214813
[19173.427294] [project1] 29888 1526408355.188319 1526408401.31973
[19176.289292] [project1] 29889 1526408355.491183 1526408403.896271
[19179.050833] [project1] 29890 1526408355.491183 1526408406.660051
[19190.192345] [project1] 29891 1526408355.751237 1526408417.810529
```

SJF_1

```
P1 29958 [19777.924730] [project1] 29959 1526409000.587762 1526409006.15733
P2 29959 [19780.724210] [project1] 29960 1526409000.843603 1526409008.817465
P3 29960 [19791.282517] [project1] 29961 1526409001.93382 1526409019.384289
P4 29961 [19811.827160] [project1] 29958 1526409000.587762 1526409039.945416
```

SJF_2

```
P2 30355 [24376.189455] [project1] 30355 1526413607.730642 1526413607.979841
P4 30356 [24376.710336] [project1] 30359 1526413607.981132 1526413608.501146
P1 30357 [24387.333510] [project1] 30356 1526413607.730642 1526413619.132892
P3 30358 [24398.033672] [project1] 30358 1526413607.981132 1526413629.841664
P5 30359 [24416.569721] [project1] 30357 1526413607.981132 1526413648.392530
```

SJF_3

```
P1 30544 [24992.765558] [project1] 30544 1526414216.581955 1526414225.52025
P2 30545 [24992.843136] [project1] 30547 1526414216.831066 1526414225.129659
P3 30546 [24992.868812] [project1] 30548 1526414216.831066 1526414225.155362
P4 30547 [25003.799595] [project1] 30549 1526414217.79907 1526414236.94850
P5 30548 [25014.830656] [project1] 30550 1526414217.327732 1526414247.134874
P6 30549 [25029.123458] [project1] 30545 1526414216.581955 1526414261.439145
P7 30550 [25049.057283] [project1] 30546 1526414216.581955 1526414281.389029
P8 30551 [25073.831949] [project1] 30551 1526414217.575263 1526414306.183613
```

PSJF_1

[19309.309667]	[project1]	29917	1526408529.317407	1526408537.23653
[19320.670701]	[project1]	29916	1526408525.925425	1526408548.393858
[19338.398508]	[project1]	29915	1526408523.182278	1526408566.135914
[19360.284721]	[project1]	29914	1526408519.517874	1526408588.39748

PSJF_2

P1 29946	[19564.222066]	[project1]	29947	1526408789.533280	1526408792.141153
P2 29947	[19569.149424]	[project1]	29946	1526408786.695139	1526408797.72450
P3 29948	[19579.690548]	[project1]	29949	1526408802.201800	1526408807.622081
P4 29949	[19583.302404]	[project1]	29950	1526408808.406777	1526408811.236843
P5 29950	[19588.330029]	[project1]	29948	1526408792.767861	1526408816.268518

PSJF_3

P1 30017	[20434.178960]	[project1]	30018	1526409661.485812	1526409662.797956
P2 30018	[20435.548521]	[project1]	30019	1526409662.839020	1526409664.168620
P3 30019	[20437.112474]	[project1]	30020	1526409664.212833	1526409665.733812
P4 30020	[20441.412413]	[project1]	30017	1526409660.150801	1526409670.37228

RR_1

P1 29995	[20326.283910]	[project1]	29995	1526409553.553410	1526409554.816076
P2 29996	[20327.655665]	[project1]	29996	1526409553.553410	1526409556.188932
P3 29997	[20329.011881]	[project1]	29997	1526409553.553410	1526409557.546266
P4 29998	[20330.311832]	[project1]	29998	1526409553.553410	1526409558.847263
P5 29999	[20331.605642]	[project1]	29999	1526409553.553410	1526409560.142113

RR_2

P1 30968	[26335.198585]	[project1]	30968	1526415549.989294	1526415568.565066
P2 30969	[26340.489345]	[project1]	30969	1526415550.486170	1526415573.860043

RR_3

P1 31380	[27479.543429]	[project1]	31380	1526416669.158449	1526416713.830558
P2 31381	[27483.926361]	[project1]	31382	1526416675.887950	1526416718.217003
P3 31382	[27487.690219]	[project1]	31381	1526416672.672430	1526416721.983891
P4 31383	[27508.486810]	[project1]	31385	1526416681.626306	1526416742.797208
P5 31384	[27513.696208]	[project1]	31384	1526416680.58586	1526416748.10601
P6 31385	[27516.284128]	[project1]	31383	1526416679.30166	1526416750.600790

3. 比較實際結果與理論結果，並解釋造成差異的原因

In any testing data, P_i ST equal to R_i . Not quite as expected.

In any testing data, every ETs are in the expected order.

In any testing data, every IDs are in the expected order.

4. 各組員的貢獻

簡暉晉: write src code, compile kernel, run testing data, discuss how to write the report.

周明德: discuss how to write src code, write the report.

沙佳哲: none

劉昕: none