

OS project1 report

第六組

1. 設計

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 STs equal to R_i .

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

4. 各組員的貢獻

簡偉晉:write src code, compile kernel, run testing data, discuss how to write report.

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

沙佳哲:none

劉昕:none