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, Pi STs equal to Ri.

4. 各組員的貢獻

   簡暐晉: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