Report OS Lab 2

Vatista 220010060 Sujata 220010058 Prakriti 220120014

August 31, 2024

1 Part 2

1.1 Order in which processes were created and killed.

```
[229346] start position = 0; end position = 67108863
   [229346] forked left child 229347
   [229346] forked right child 229348
   [229348] start position = 33554433; end position = 67108863
   [229348] forked left child 229350
   [229348] forked right child 229351
   [229347] start position = 0; end position = 33554432
   [229347] forked left child 229352
   [229347] forked right child 229353
   [229350] start position = 33554433; end position = 50331648
   [229350] forked left child 229355
   [229351] start position = 50331649; end position = 67108863
   [229351] forked left child 229356
   [229351] forked right child 229357
   [229353] start position = 16777217; end position = 33554432
   [229353] forked left child 229359
   [229353] forked right child 229360
   [229350] forked right child 229358
   [229352] start position = 0; end position = 16777216
   [229352] forked left child 229361
   [229352] forked right child 229362
   [229357] start position = 58720257; end position = 67108863
   [229357] forked searcher child 229363
   [229357] forked searcher child 229363
```

```
[229362] start position = 8388609; end position = 16777216
```

- [229362] forked searcher child 229364
- [229362] forked searcher child 229364
- [229355] start position = 33554433; end position = 41943041
- [229355] forked left child 229365
- [229355] forked right child 229366
- [229360] start position = 25165826; end position = 33554432
- [229360] forked searcher child 229367
- [229360] forked searcher child 229367
- [229359] start position = 16777217; end position = 25165825
- [229359] forked left child 229368
- [229356] start position = 50331649; end position = 58720256
- [229359] forked right child 229369
- [229358] start position = 41943042; end position = 50331648
- [229358] forked searcher child 229370
- [229358] forked searcher child 229370
- [229365] start position = 33554433; end position = 37748737
- [229365] forked searcher child 229371
- [229365] forked searcher child 229371
- [229356] forked searcher child 229372
- [229356] forked searcher child 229372
- [229369] start position = 20971522; end position = 25165825
- [229369] forked searcher child 229373
- [229369] forked searcher child 229373
- [229361] start position = 0; end position = 8388608
- [229366] start position = 37748738; end position = 41943041
- [229366] forked searcher child 229374
- [229366] forked searcher child 229374
- [229368] start position = 16777217; end position = 20971521
- [229368] forked searcher child 229375
- [229368] forked searcher child 229375
- [229361] forked right child 229377
- [229361] forked left child 229376
- [229376] start position = 0; end position = 4194304
- [229376] forked searcher child 229378
- [229376] forked searcher child 229378
- [229377] start position = 4194305; end position = 8388608
- [229377] forked searcher child 229379
- [229377] forked searcher child 229379
- [229373] didn't find

[229369] searcher child 229373 returned

[229374] didn't find

[229366] searcher child 229374 returned

[229371] didn't find

[229365] searcher child 229371 returned

[229355] left child 229365 returned

[229355] right child 229366 returned

[229350] left child 229355 returned

[229379] didn't find

[229378] didn't find

[229377] searcher child 229379 returned

[229376] searcher child 229378 returned

[229361] left child 229376 returned

[229361] right child 229377 returned

[229352] left child 229361 returned

[229375] didn't find

[229368] searcher child 229375 returned

[229359] left child 229368 returned

[229359] right child 229369 returned

[229353] left child 229359 returned

[229363] found at 64520807

[229357] searcher child 229363 returned

[229372] didn't find

[229370] didn't find

[229356] searcher child 229372 returned

[229351] left child 229356 returned

[229351] right child 229357 returned

[229358] searcher child 229370 returned

[229350] right child 229358 returned

[229348] left child 229350 returned

[229348] right child 229351 returned

[229364] didn't find

[229362] searcher child 229364 returned

[229352] right child 229362 returned

[229347] left child 229352 returned

[229367] didn't find

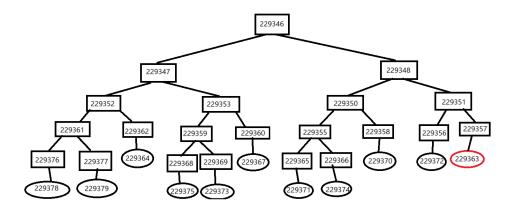
[229360] searcher child 229367 returned

[229353] right child 229360 returned

[229347] right child 229353 returned

[229346] left child 229347 returned

1.2 Process tree



2 Part 3

2.1 Order in which processes were created and killed.

```
[229724] start position = 0; end position = 67108863
   [229724] forked left child 229725
   [229724] forked right child 229726
   [229725] start position = 0; end position = 33554432
   [229725] forked left child 229727
   [229725] forked right child 229728
   [229726] start position = 33554433; end position = 67108863
   [229726] forked left child 229729
   [229726] forked right child 229730
   [229729] start position = 33554433; end position = 50331648
   [229728] start position = 16777217; end position = 33554432
   [229729] forked left child 229731
   [229729] forked right child 229732
   [229727] start position = 0; end position = 16777216
   [229728] forked left child 229733
   [229728] forked right child 229735
   [229727] forked left child 229734
   [229731] start position = 33554433; end position = 41943041
```

```
[229727] forked right child 229736
[229731] forked left child 229737
[229735] start position = 25165826; end position = 33554432
[229732] start position = 41943042; end position = 50331648
[229733] start position = 16777217; end position = 25165825
[229734] start position = 0; end position = 8388608
[229733] forked left child 229739
[229732] forked searcher child 229738
[229731] forked right child 229740
[229733] forked right child 229742
[229734] forked left child 229741
[229734] forked right child 229743
[229735] forked searcher child 229744
[229740] start position = 37748738; end position = 41943041
[229737] start position = 33554433; end position = 37748737
[229739] start position = 16777217; end position = 20971521
[229740] forked searcher child 229745
[229730] start position = 50331649; end position = 67108863
[229736] start position = 8388609; end position = 16777216
[229737] forked searcher child 229746
[229739] forked searcher child 229747
[229730] forked left child 229748
[229743] start position = 4194305; end position = 8388608
[229742] start position = 20971522; end position = 25165825
[229741] start position = 0; end position = 4194304
[229743] forked searcher child 229751
[229742] forked searcher child 229752
[229741] forked searcher child 229753
[229736] forked searcher child 229749
[229730] forked right child 229750
[229748] start position = 50331649; end position = 58720256
[229748] forked searcher child 229754
[229750] start position = 58720257; end position = 67108863
[229750] forked searcher child 229755
[229747] didn't find
[229751] didn't find
[229746] didn't find
[229745] didn't find
```

[229743] searcher child 229751 returned [229737] searcher child 229746 returned

```
[229740] searcher child 229745 returned
[229731] left child 229737 returned
[229739] searcher child 229747 returned
[229731] right child 229740 returned
[229733] left child 229739 returned
[229729] left child 229731 returned
[229753] didn't find
[229752] didn't find
[229741] searcher child 229753 returned
[229734] left child 229741 returned
[229734] right child 229743 returned
[229727] left child 229734 returned
[229742] searcher child 229752 returned
[229733] right child 229742 returned
[229728] left child 229733 returned
[229755] found at 64520807
[229750] received SIGTERM
[229748] received SIGTERM
[229729] received SIGTERM
[229726] received SIGTERM
[229732] received SIGTERM
[229725] received SIGTERM
[229727] received SIGTERM
[229728] received SIGTERM
[229736] received SIGTERM
[229735] received SIGTERM
```

2.2 Process tree

