



```
∞ Share
                                                                                                                                                                        Clear
        main.c
                                                                                              Output
                                                                                          ^ Producer produced: 83
                                                                                            Consumer consumed: 83
       54 - int main() {
                                                                                            Producer produced: 86
               pthread_t prod, cons;
8
                                                                                            Consumer consumed: 86
       56
                                                                                            Producer produced: 77
                sem_init(&empty, 0, SIZE);
sem_init(&full, 0, 0);
                                                                                            Consumer consumed: 77
o
                                                                                            Producer produced: 15
                pthread_mutex_init(&mutex, NULL);
                                                                                            Consumer consumed: 15
1
       60
                                                                                            Producer produced: 93
                pthread_create(&prod, NULL, producer, NULL);
pthread_create(&cons, NULL, consumer, NULL);
                                                                                            Consumer consumed: 93
0
                                                                                            Producer produced: 35
       63
                                                                                            Consumer consumed: 35
       64
                pthread_join(prod, NULL);
pthread_join(cons, NULL);
                                                                                            Producer produced: 86
©
                                                                                            Consumer consumed: 86
                                                                                            Producer produced: 92
0
                sem_destroy(&empty);
                                                                                            Consumer consumed: 92
       68
                sem_destroy(&full);
                                                                                            Producer produced: 49
                pthread_mutex_destroy(&mutex);
                                                                                            Consumer consumed: 49
                                                                                            Producer produced: 21
                                                                                            Consumer consumed: 21
```

```
∝ Share
                                                                        Run
                                                                                                                                                    Clear
       main.c
                                                                                   Output
                  put_fork(i);
                                                                                ^ Philosopher 1 is Thinking
R
                                                                                 Philosopher 2 is Thinking
                                                                                 Philosopher 3 is Thinking
                                                                                 Philosopher 4 is Thinking
          int main() {
                                                                                 Philosopher 5 is Thinking
                                                                                 Philosopher 1 is Hungry
5
              pthread_t thread_id[N];
      64
                                                                                 Philosopher 1 takes forks 5 and 1
                                                                                 Philosopher 1 is Eating
追
              sem_init(&mutex, 0, 1);
                                                                                 Philosopher 2 is Hungry
              for (i = 0; i < N; i++)
                                                                                 Philosopher 3 is Hungry
0
                  sem_init(&S[i], 0, 0);
      68
                                                                                 Philosopher 3 takes forks 2 and 3
                                                                                 Philosopher 3 is Eating
•
                                                                                 Philosopher 4 is Hungry
                  pthread_create(&thread_id[i], NULL, philosopher, &phil_num[i]
                                                                                 Philosopher 5 is Hungry
                                                                                 Philosopher 1 puts down forks 5 and 1
0
                  printf("Philosopher %d is Thinking\n", i + 1);
                                                                                 Philosopher 1 is Thinking
                                                                                 Philosopher 5 takes forks 4 and 5
                                                                                 Philosopher 5 is Eating
                                                                                 Philosopher 3 puts down forks 2 and 3
                  pthread_join(thread_id[i], NULL);
                                                                                 Philosopher 3 is Thinking
TS
                                                                                Philosopher 2 takes forks 1 and 2
                                                                                Philosopher 2 is Eating
```

