Problem 1 (4.17, code file: 4_17)

Explanation:

We use the exact program provided in the homework, and add threats as in the code file. For more detail see the comments in the code.
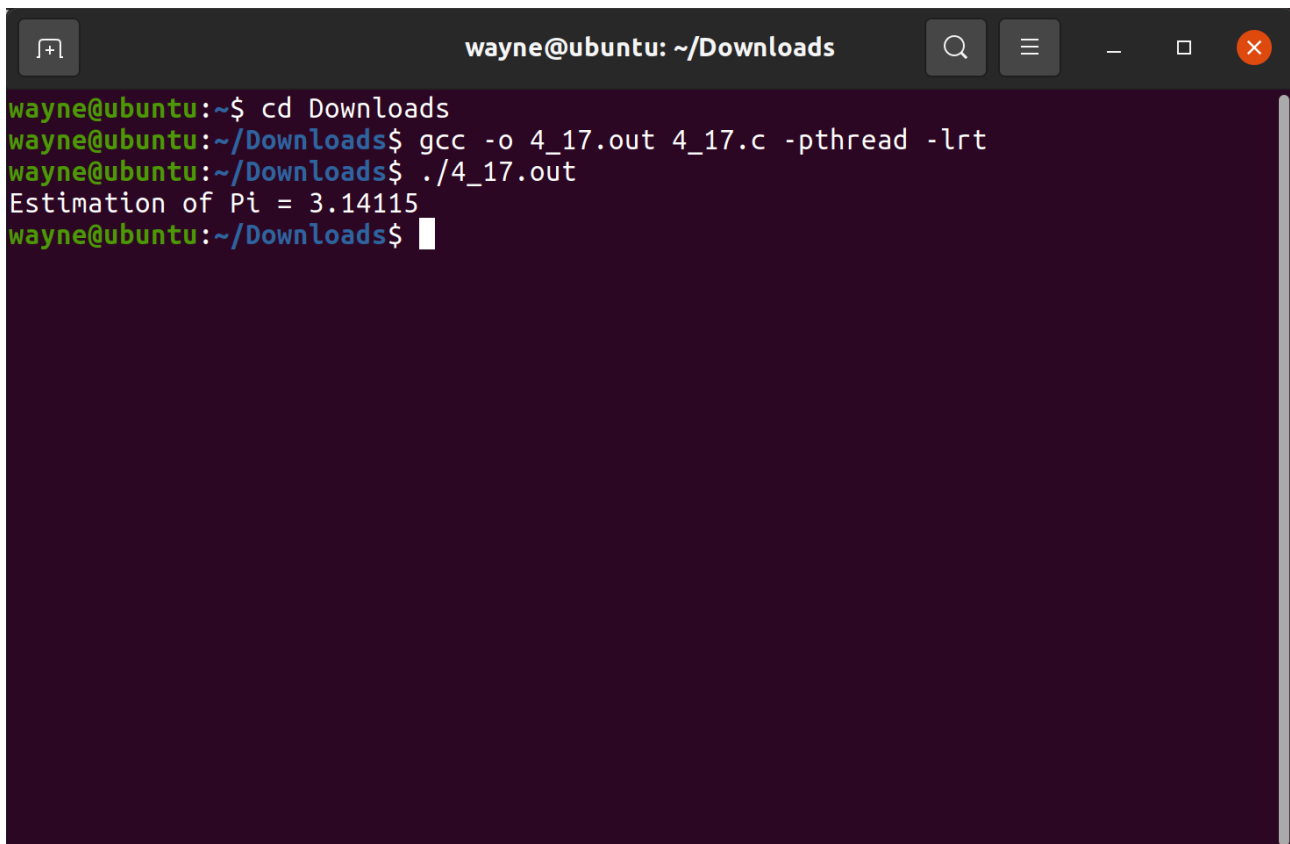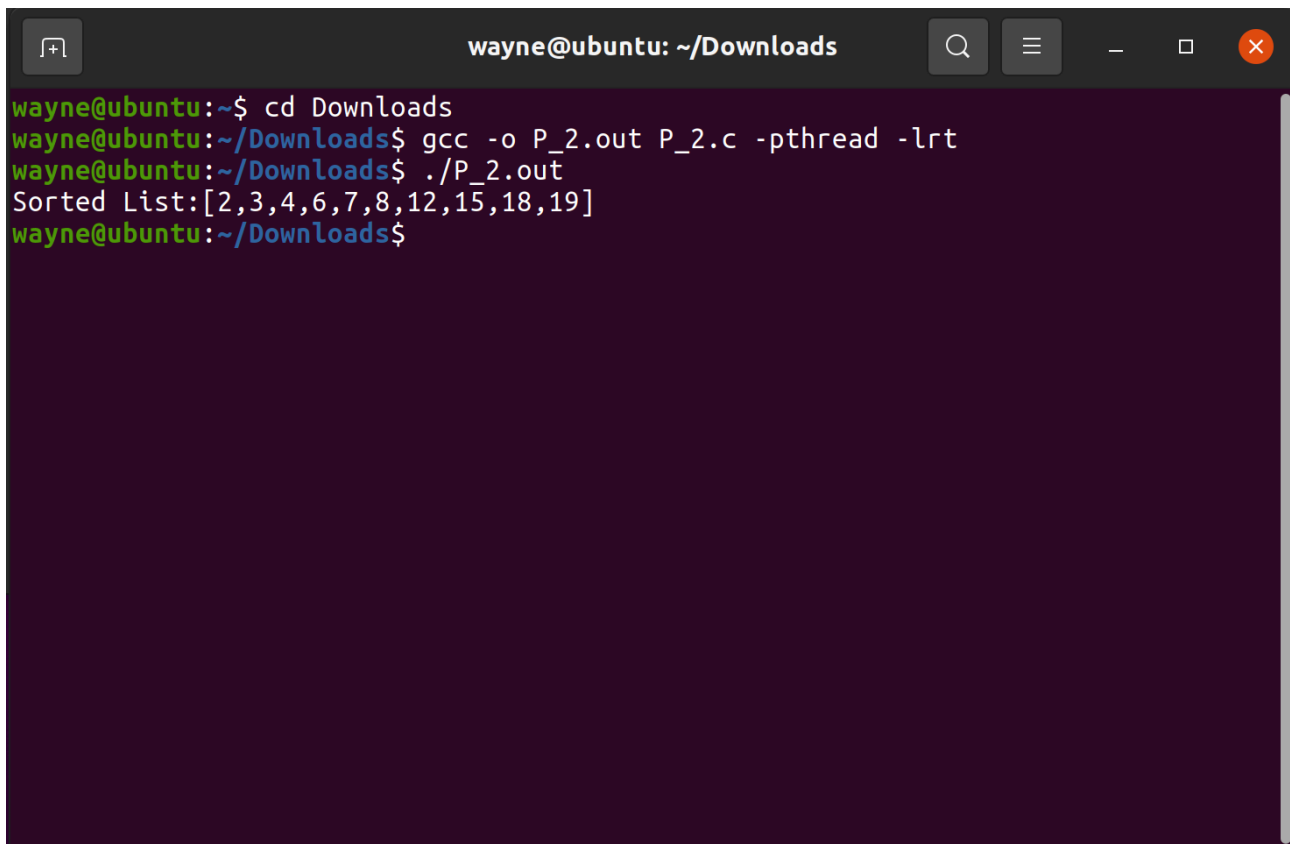
Problem 2 (Project 2, code file: P_2)

```
wayne@ubuntu: ~/Downloads

wayne@ubuntu:~$ cd Downloads
wayne@ubuntu:~/Downloads$ gcc -o P_2.out P_2.c -pthread -lrt
wayne@ubuntu:~/Downloads$ ./P_2.out
Sorted List:[2,3,4,6,7,8,12,15,18,19]
wayne@ubuntu:~/Downloads$
```

Explanation:

We use insertion sort and a merge function in this problem. Create two threads for split insertion sort and one thread for merging. Finally print the sorted list in the parent (main) thread. Using the unsorted list provided in the example. For more detail see the comments in the code.