**Lottery Scheduler Test Cases:**

**Test 1 Input:**

fork

timer 10

ps

quit

**Test 1 Output:**

ianwasem@shell 1> fork

pid: 1 forked: 2

ianwasem@shell 2> timer 10

ianwasem@shell 3> timer 10

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 1

ianwasem@shell 4> quit

**Test 2 Input:**

fork

fork

timer 10

ps

quit

**Test 2 Output:**

ianwasem@shell 1> fork

pid: 1 forked: 2

ianwasem@shell 2> fork

pid: 1 forked: 3

ianwasem@shell 3> timer 10

Scheduler selected pid: 1

Scheduler selected pid: 3

Scheduler selected pid: 2

Scheduler selected pid: 3

Scheduler selected pid: 3

Scheduler selected pid: 1

Scheduler selected pid: 3

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 2

ianwasem@shell 4> ps

pid: 1, parent: 0 state: RUNNABLE tickets: 25

pid: 2, parent: 1 state: RUNNING tickets: 25

pid: 3, parent: 1 state: RUNNABLE tickets: 25

ianwasem@shell 5> quit

**Test 3 Input:**

fork 1 75

timer 10

timer 10

ps

quit

**Test 3 Output:**

ianwasem@shell 1> fork 1 75

pid: 1 forked: 2

ianwasem@shell 2> timer 10

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

ianwasem@shell 3> timer 10

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 2

ianwasem@shell 4> ps

pid: 1, parent: 0 state: RUNNABLE tickets: 25

pid: 2, parent: 1 state: RUNNING tickets: 75

ianwasem@shell 5> quit

**Test 4 Input:**

fork

fork

fork

timer 20

ps

quit

**Test 4 Output:**

ianwasem@shell 1> fork

pid: 1 forked: 2

ianwasem@shell 2> fork

pid: 1 forked: 3

ianwasem@shell 3> fork

pid: 1 forked: 4

ianwasem@shell 4> timer 20

Scheduler selected pid: 1

Scheduler selected pid: 1

Scheduler selected pid: 4

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 3

Scheduler selected pid: 2

Scheduler selected pid: 3

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 4

Scheduler selected pid: 2

Scheduler selected pid: 4

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 4

Scheduler selected pid: 3

Scheduler selected pid: 4

ianwasem@shell 5> ps

pid: 1, parent: 0 state: RUNNABLE tickets: 25

pid: 2, parent: 1 state: RUNNABLE tickets: 25

pid: 3, parent: 1 state: RUNNABLE tickets: 25

pid: 4, parent: 1 state: RUNNING tickets: 25

ianwasem@shell 6> quit

**Test 5 Input (this is to make sure that the updated fork command correctly works):**

fork 1 150

fork 2 1000

fork 2 75

schedule

ps

quit

**Test 5 Output:**

ianwasem@shell 1> fork 1 150

pid: 1 forked: 2

ianwasem@shell 2> fork 2 1000

pid: 2 forked: 3

ianwasem@shell 3> fork 2 75

pid: 2 forked: 4

ianwasem@shell 4> schedule

Scheduler selected pid: 3

ianwasem@shell 5> ps

pid: 1, parent: 0 state: RUNNABLE tickets: 25

pid: 2, parent: 1 state: RUNNABLE tickets: 150

pid: 3, parent: 2 state: RUNNING tickets: 1000

pid: 4, parent: 2 state: RUNNABLE tickets: 75

ianwasem@shell 6> quit

**Test 6 Input:**

fork 1 500

timer 10

ps

quit

**Test 6 Output:**

ianwasem@shell 1> fork 1 500

pid: 1 forked: 2

ianwasem@shell 2> timer 10

Scheduler selected pid: 2

Scheduler selected pid: 1

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

Scheduler selected pid: 2

ianwasem@shell 3> ps

pid: 1, parent: 0 state: RUNNABLE tickets: 25

pid: 2, parent: 1 state: RUNNING tickets: 500

ianwasem@shell 4> quit