**ASSIGNMENT 6**

#include <stdio.h>

#include <pthread.h>

#include <unistd.h>

int D = 100;

void\* process1(void\* arg) {

int temp = D;

usleep(100); // simulate time slice

temp += 20;

usleep(100); // simulate delay

D = temp;

return NULL;

}

void\* process2(void\* arg) {

int temp = D;

usleep(100);

temp -= 50;

usleep(100);

D = temp;

return NULL;

}

void\* process3(void\* arg) {

int temp = D;

usleep(100);

temp += 10;

usleep(100);

D = temp;

return NULL;

}

int main() {

pthread\_t t1, t2, t3;

for (int i = 0; i < 10; i++) { // run multiple times

D = 100;

pthread\_create(&t1, NULL, process1, NULL);

pthread\_create(&t2, NULL, process2, NULL);

pthread\_create(&t3, NULL, process3, NULL);

pthread\_join(t1, NULL);

pthread\_join(t2, NULL);

pthread\_join(t3, NULL);

printf("Final D: %d\n", D);

}

return 0;

}