**EXPERIMENT – 30**

30. Write C programs to demonstrate the following thread related concepts.

(i) create (ii) join (iii) equal (iv) exit

#include <stdio.h>

#include <stdlib.h>

#include <pthread.h>

#include <unistd.h>

void\* threadFunc1(void\* arg) {

printf("Thread 1 is running...\n");

pthread\_exit("Thread 1 finished");

}

void\* threadFunc2(void\* arg) {

printf("Thread 2 is running...\n");

pthread\_exit("Thread 2 finished");

}

int main() {

pthread\_t tid1, tid2;

void\* status1;

void\* status2;

pthread\_create(&tid1, NULL, threadFunc1, NULL);

pthread\_create(&tid2, NULL, threadFunc2, NULL);

pthread\_join(tid1, &status1);

pthread\_join(tid2, &status2);

if (pthread\_equal(tid1, tid2))

printf("Thread 1 and Thread 2 are equal.\n");

else

printf("Thread 1 and Thread 2 are NOT equal.\n");

printf("Thread 1 exited with message: %s\n", (char\*)status1);

printf("Thread 2 exited with message: %s\n", (char\*)status2);

return 0;

}

SAMPLE OUTPUT:

Thread 1 is running...

Thread 2 is running...

Thread 1 and Thread 2 are NOT equal.

Thread 1 exited with message: Thread 1 finished

Thread 2 exited with message: Thread 2 finished