NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & IT
Specialization in Data Science

CT-353
OPERATING SYSTEMS

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```c
#include<stdio.h>

#include<stdlib.h>

#include<pthread.h>

// Function declarations

void *function1(void *ptr);

void *function2(void *ptr);

int main()

{

    pthread_t thread1, thread2;

    char *message1 = "thread 1";

    char *message2 = "thread 2";

    int iret1, iret2;

    // Create thread 1

    iret1 = pthread_create(&thread1, NULL, function1, (void *)message1);

    if (iret1) {

        printf("Error creating thread 1\n");

        exit(1);

    }

    // Create thread 2

    iret2 = pthread_create(&thread2, NULL, function2, (void *)message2);

    if (iret2) {

        printf("Error creating thread 2\n");
```

```c
        exit(1);
    }

    // Wait for the threads to finish
    pthread_join(thread1, NULL);
    pthread_join(thread2, NULL);

    printf("thread 1 returns: %d\n", iret1);
    printf("thread 2 returns: %d\n", iret2);

    exit(0);
}

void *function1(void *ptr)
{
    char *message = (char *)ptr;
    printf("%s\n", message);
    return NULL;
}

void *function2(void *ptr)
{
    char *message = (char *)ptr;
    printf("%s\n", message);
    return NULL;
}
```

Output :

```
C:\Users\User1\Desktop\Untit    X    +    ∨

thread 1
thread 2
thread 1 returns: 0
thread 2 returns: 0


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Process exited after 0.08935 seconds with return value 0
Press any key to continue . . .
```