

```

/* File: thread.c */  

/* This program demonstrates how to create a thread from a process.  

The process (or the main thread) first creates a thread (my_thread)  

which is put into a ready queue upon creation. The main thread then  

prints a message and sleeps (gives up the CPU) for 20 seconds. The  

new thread, in the meantime, goes into a loop for 5 iterations before  

it dies.*/  

  

#include <stdio.h>  

#include <string.h>  

#include <unistd.h>  

#include <pthread.h>  

#include <stdlib.h>  

  

// Child Thread code  

void *my_thread (void *not_used)  

{  

    int x;  

    for (x = 0; x < 5; x++)  

    {  

        printf ("I am a thread at %d\n", x);  

        flushall();  

        sleep (1);  

    }  

    return (NULL);  

}  

  

int main(void)  

{  

    pthread_attr_t attr;  

    pthread_attr_init( <MISSING CODE> );  

    pthread_attr_setinheritsched( &attr,  

PTHREAD_EXPLICIT_SCHED );  

    pthread_create(NULL,&attr,<MISSING CODE>,NULL);  

    printf("Thread running, I am sleeping\n");  

    flushall();  

    sleep (20); // 15 s more after printing stops  

    return (EXIT_SUCCESS);  

}

```