

## 1. Thread Creation

if *man pthread\_create* does not work: **sudo apt install -y manpages-posix manpages-posix-dev**

[pthread\\_create\(\)](#), [pthread\\_join\(\)](#)

```
#include <pthread.h>
int pthread_create(pthread_t *thread, const pthread_attr_t *attr, void *(*start_routine) (void *), void *arg);
int pthread_join(pthread_t thread, void **retval);
```

[threads-api/thread\\_create.c](#)

```
1  #include <assert.h>
2  #include <stdio.h>
3  #include <pthread.h>
4
5  typedef struct {
6      int a;
7      int b;
8  } myarg_t;
9
10 void *mythread(void *arg) {
11     myarg_t *args = (myarg_t *) arg;
12     printf("%d %d\n", args->a, args->b);
13     return NULL;
14 }
15
16 int main(int argc, char *argv[]) {
17     pthread_t p;
18     myarg_t args = { 10, 20 };
19
20     int rc = pthread_create(&p, NULL, mythread, &args);
21     assert(rc == 0);
22     (void) pthread_join(p, NULL);
23     printf("done\n");
24     return 0;
25 }
```

```
$ gcc -Wall -o thread_create thread_create.c -pthread
$ ./thread_create
10 20
done
$
```