

**#1 Thread of Execution**

```
int f(int a, int v1, int v2, ...10 more) {
    int b=a+1;
    if(b>99) return 3;
    return b;
}
```

How does return ‘work’? i.e. How does the CPU know what to do next?

**#2 Introduction to threads and pthreads**

pthread\_create

pthread\_join

pthread\_exit

**#include <pthread.h>**

```
int pthread_create(pthread_t *thread,
    pthread_attr_t *attr,
    void *(*start routine) (void *),
    void *arg);
```

```
int pthread_join(pthread_t thread, void **retval);
```

```
void pthread_exit(void *retval);
```

Compile and link with -pthread

**#3** My program calls pthread\_create twice. How many stacks does my process have?

**#4** What is the difference between a process and a thread?

#5 What does `pthread_cancel` do?  
and are there alternatives?

#6 Differences between `exit()` and `pthread_exit()`?

...so why would you call `pthread_exit` in your main method?

#7 Give four ways that a thread can be terminated

#8 Hello World with pthreads?

#9 What happens if I call `pthread_create` 100 or 10000 times?