


```
nik@Nicolas-MacBook-Air:~/GitHub/cpp_sandbox/multithreading/thread_spawn$ ./a.out
```

```
thread #0 id = 0x1041f0000
```

```
thread #1 id = 0x104273000
```

```
thread #2 id = 0x1042f6000
```

```
thread #3 id = 0x1041f0000
```

```
thread #4 id = 0x104273000
```

```
thread #5 id = 0x1042f6000
```

```
thread #6 id = 0x1041f0000
```

```
thread #7 id = 0x104273000
```

```
thread #8 id = 0x1042f6000
```

```
thread #9 id = 0x1041f0000
```

```
Actual thread spawned = 3
```

```
0x1041f0000
```

```
0x104273000
```

```
0x1042f6000
```



Possible output

```
nik@Nicolas-MacBook-Air:~/GitHub/cpp_sandbox/multithreading/thread_spawn$ ./a.out
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```

```
0x1042f6000
```

std::async

```
template< class Function, class... Args >  
std::future<typename std::result_of<Function(Args...)>::type>  
async( std::launch policy, Function&& f, Args&&... args );
```

- The template function `async` runs the function `f` asynchronously (potentially in a separate thread which may be part of a thread pool) and returns a `std::future` that will eventually hold the result of that function call.
- Policies to spawn computation are:
 - `std::launch::async`
 - `std::launch::deferred`
 - `launch::any` (bitwise or `async` | `deferred`)