

Implement Thread Local Storage

You are working on a compiler team. You are tasked with providing an api for the compiler to implement thread-local storage. Thread-local storage is equivalent to a per-thread static variable (see https://en.wikipedia.org/wiki/Thread-local_storage for more detailed explanation).

You must implement the following API for the compiler. NOTE this api is for the compiler's use, not the end user. That is why it is simpler than the standard TLS interface.

```
// Called once before any calls to GetThreadLocalStorage on any thread.
```

```
void InitThreadLocalStorage()
```

```
// id is a process-wide id to reference the storage. If the id does not exist,
```

```
// the storage is allocated to size cb. If id exists, return the corresponding
```

```
// thread-local variable.
```

```
void* GetThreadLocalStorage(int id, size_t cb)
```

```
// remove the storage allocated for the given id.
```

```
void RemoveThreadLocalStorage(int id)
```