

1. דוגמה להרצה בה יש זליגות זכרון אבל הקומפילציה עברה:

```
danielle2003@DESKTOP-KCH3605:~$ ./BasicCheck.sh /home/danielle2003/danielle/ariel-cpp-5779/01-what-is-cpp/1-hello a.out
clang++-6.0 -std=c++17 *.cpp
Compilation PASS      Memory leaks FAIL      Tread race PASS
```

```
/**
 * This is a "hello world" program for the C++ course.
 */

#include <iostream>
using namespace std;

int main() {
    string name;
    cout << "What is your name? ";
    // cin >> name;
    cout << endl << "Hello " << name << "!" << endl;
    cout << (1 << 5) << endl;
    int* test = (int *)std::malloc(4*sizeof(int));
    return 0;
}
```

2. דוגמה להרצה בה הכל עבר בהצלחה:

```
danielle2003@DESKTOP-KCH3605:~$ ./BasicCheck.sh /home/danielle2003/danielle/ariel-cpp-5779/01-what-is-cpp/1-hello a.out
clang++-6.0 -std=c++17 *.cpp
Compilation PASS      Memory leaks PASS      Tread race PASS
```

```
/**
 * This is a "hello world" program for the C++ course.
 */

#include <iostream>
using namespace std;

int main() {
    string name;
    cout << "What is your name? ";
    // cin >> name;
    cout << endl << "Hello " << name << "!" << endl;
    cout << (1 << 5) << endl;
    return 0;
}
```

3. דוגמה להרצה שאין זליגת זכרון, הקומפילציה עברה אבל יש זליגת תהליכונים:

```
danielle2003@DESKTOP-KCH3605:~$ ./BasicCheck.sh /home/danielle2003/danielle/ariel-cpp-5779/01-what-is-cpp/1-hello race1
make: 'race1' is up to date.
Compilation PASS      Memory leaks PASS      Tread race FAIL

#include <pthread.h>

int var = 0;

void* child_fn ( void* arg )
{
    var++; /* Unprotected relative to parent */ /* this is line 6 */
    return NULL;
}

int main ( void )
{
    pthread_t child;
    pthread_create (&child, NULL, child_fn, NULL ) ;
    var++; /* Unprotected relative to child */ /* this is line 13 */
    pthread_join (child, NULL );
    return 0;
}
```