

- Test File: abort\_on\_error.c

```
#include "stdlib.h"
#include "stdint.h"
#include "stdio.h"
#include "limits.h"
```

```
int main()
```

```
{
```

```
    int a=INT32_MAX;
```

```
    short b=a;
```

```
    printf("Not aborted!\n");//if the abort_on_error works it will not print out this
line;
```

```
    return 1;
```

```
}
```

- Test method:

Two way to compile the source file:

1. clang -fioc-implicit-conversion -fioc-**abort-on-error** abort\_on\_error.c

The program will trapped after the conversion, and the following line will not be printed out.

2. clang -fioc-implicit-conversion abort\_on\_error.c

As normal, the program will not be trapped after integer error occurs. The line following the error will be printed out.

- Result:

1. Without -fioc-**abort-on-error**:

```
qiqi@qiqi-HP-Pavilion-dm1-Notebook-PC:~/Project/qiqi_test$ clang -fioc-implicit-
conversion abort_on_error.c -o abort_on_error
qiqi@qiqi-HP-Pavilion-dm1-Notebook-PC:~/Project/qiqi_test$ ./abort_on_error
abort_on_error.c:9:10: runtime error: value lost in conversion of '2147483647' f
rom 'int' (int) to 'short' (short)
Not aborted!
qiqi@qiqi-HP-Pavilion-dm1-Notebook-PC:~/Project/qiqi_test$
```

2. With -fioc-**abort-on-error**:

```
qiqi@qiqi-HP-Pavilion-dm1-Notebook-PC:~/Project/qiqi_test$ clang -fioc-implicit-
conversion -fioc-abort-on-error abort_on_error.c -o abort_on_error
qiqi@qiqi-HP-Pavilion-dm1-Notebook-PC:~/Project/qiqi_test$ ./abort_on_error
abort_on_error.c:9:10: runtime error: value lost in conversion of '2147483647' f
rom 'int' (int) to 'short' (short)
Illegal instruction (core dumped)
qiqi@qiqi-HP-Pavilion-dm1-Notebook-PC:~/Project/qiqi_test$
```