# std::jmp_buf

Defined in header <csetjmp>

```
typedef /* unspecified */ jmp_buf;
```

The std::jmp_buf type is an array type suitable for storing information to restore a calling environment. The stored information is sufficient to restore execution at the correct block of the program and invocation of that block. The state of floating-point status flags, or open files, or any other data is not stored in an object of type jmp_buf.

## Example

Run this code

```
#include <iostream>
#include <csetjmp>

std::jmp_buf my_jump_buffer;

[[noreturn]] void foo(int count)
{
    std::cout << "foo(" << count << ") called\n";
    std::longjmp(my_jump_buffer, count+1);  // setjmp() will return count+1
}

int main()
{
    volatile int count = 0; // modified locals in setjmp scope must be volatile
    if (setjmp(my_jump_buffer) != 5) { // equality against constant expression in an if
        count = count + 1; // ++count, count += 1, etc on 'volatile'-qualified
                           // left operand are deprecated since C++20 (P1152)
        foo(count); // This will cause setjmp() to exit
    }
}
```

Output:

```
foo(1) called
foo(2) called
foo(3) called
foo(4) called
```

## See also

| | |
|---|---|
| **setjmp** | saves the context<br>(function macro) |
| **longjmp** | jumps to specified location<br>(function) |
| **C documentation** for **jmp_buf** | |