

std::tmpnam

Defined in header `<cstdio>`

```
char* tmpnam( char* filename );
```

Creates a unique filename that does not name a currently existing file, and stores it in the character string pointed to by `filename`. The function is capable of generating up to `TMP_MAX` of unique filenames, but some or all of them may already be in use, and thus not suitable return values.

std::tmpnam modifies static state and is not required to be thread-safe.

Parameters

filename - pointer to the character array capable of holding at least `L_tmpnam` bytes, to be used as a result buffer. If a null pointer is passed, a pointer to an internal static buffer is returned.

Return value

`filename` if `filename` was not a null pointer. Otherwise a pointer to an internal static buffer is returned. If no suitable filename can be generated, a null pointer is returned.

Notes

Although the names generated by **std::tmpnam** are difficult to guess, it is possible that a file with that name is created by another process between the moment **std::tmpnam** returns and the moment this program attempts to use the returned name to create a file. The standard function `std::tmpfile` and the POSIX function `mkstemp` (<http://pubs.opengroup.org/onlinepubs/9699919799/functions/mkstemp.html>) do not have this problem (creating a unique directory using only the standard C library still requires the use of `tmpnam`).

POSIX systems additionally define the similarly named function `tempnam` (<http://pubs.opengroup.org/onlinepubs/9699919799/functions/tempnam.html>), which offers the choice of a directory (which defaults to the optionally defined macro `P_tmpdir` (<http://pubs.opengroup.org/onlinepubs/9699919799/basedefs/stdio.h.html>)).

Example

Run this code

```
#include <iostream>
#include <cstdio>
#include <string>

int main()
{
    std::string name1 = std::tmpnam(nullptr);
    std::cout << "temporary file name: " << name1 << '\n';

    char name2[L_tmpnam];
    if (std::tmpnam(name2)) {
        std::cout << "temporary file name: " << name2 << '\n';
    }
}
```

Possible output:

```
temporary file name: /tmp/fileDjwifs
temporary file name: /tmp/fileEv2bfW
```

See also

| | |
|------------------------------------|---|
| tmpfile | creates and opens a temporary, auto-removing file (function) |
| temp_directory_path (C++17) | returns a directory suitable for temporary files (function) |

C documentation for tmpnam

Retrieved from "<https://en.cppreference.com/mwiki/index.php?title=cpp/io/c/tmpnam&oldid=128498>"