Inline function

→ An inline function is a regular fn that is defined by the inline keyword.

→ The code for an inline fn is inserted directly into the code of the calling function by compiler during compiling, which can result in faster execution & less overhead compared compared to regular fn calls.

→ Instead of calling function the statement of fn are pasted in calling fn.

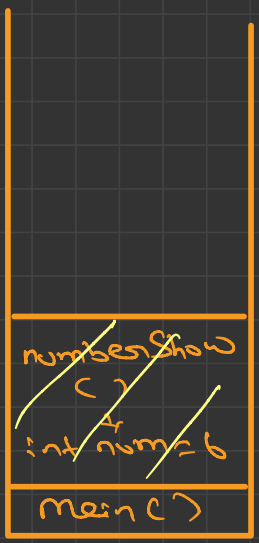
→ Used with small sized functions, so that executables are small
(handled automatically by compiler optimization level)

```
void numberShow ( int num) {
    cout << num << endl;
    — hidden return —
}

int main ( )
{
    numberShow ( 6) ;
}
```

function overloading

To resolve this we can create inline function.



stack unwinding

Inline function

use in case of small function

```
inline void numberShow (int num)
{
    cout << num;
}

int main()
{
    numberShow(6);
}
```

numberShow(6); ← replace with cout << 10;

during the compilation phase it will replace all the function calling with inline function

matlab baar function call nhi hoga → function overheading nhi hogi

↓

jha jha function call hai vo sab replace kar dega

Disadvantage ;

Agar bhot jada use kar liye to executable size increase.

↓

Suppose if inline function

↓

2000 lines

↓

difficult to replace or increase the size of executable