

Static Variables In C - C Tutorial In Hindi #42.mp4 - VLC media player

Media Playback Audio Video Subtitle Tools View Help

LOCAL VARIABLES (RECAP)

- ✓ Scope is a region of the program where a defined variable can exist and beyond which it cannot be accessed.
- ✓ Variables which are accessed inside a function or a block are called **local variables**.
- ✓ They can only be accessed by the function they are declared in!
- ✓ They are inaccessible to the functions outside the function they are declared in!

```
int main() {  
    int a, int b;  
    a = myfunc();  
}
```

```
int myfunc(int a) {  
    int a2 = 471;  
}
```

02:42 28:44

Static Variables In C - C Tutorial In Hindi #42.mp4 - VLC media player

Media Playback Audio Video Subtitle Tools View Help

GLOBAL VARIABLES (RECAP)

- ✓ These are the variables defined outside the main method.
- ✓ Global variables are accessible throughout the entire program from any function.
- ✓ If a local and global variable has the same name, the local variable will take preference.

```
int g1;  
g1 = 7;  
int main() {  
    // some code  
    return 0;  
}
```

```
int func() {  
    // int g1 = 3;  
    printf("%d", g1);  
}
```

04:43 28:44

Static Variables In C - C Tutorial In Hindi #42.mp4 - VLC media player

Media Playback Audio Video Subtitle Tools View Help

46 WPM 42 45%

46 WPM 42 45%

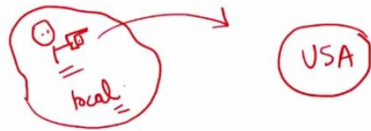
FORMAL ARGUMENTS

- These variables are treated as local variables within a function.
- These variables take precedence over global variables.

```
#include <stdio.h>

int factorial(int number){
    if (number == 1 || number == 0){
        return 1;
    }
    else{
        return (number * factorial(number - 1));
    }
}

int main(){
    int num;
    printf("Enter the number you want the factorial of\n");
    scanf("%d", &num);
    printf("The factorial of %d is %d\n", num, factorial(num));
    return 0;
}
```



STATIC VARIABLES IN C

Static data type name = value;
Static int harry = 7;

- Static variables are variables which have a property of preserving their values even when they go out of scope.
- They preserve their value from the previous scope and are not initialized again.
- Static variable remains in memory throughout the span of the program.
- Static variables are initialized to 0 if not initialized explicitly.
- In C, static variables can only be initialized using constant literals.

// Static int b = func1();
b = 5;

```
func1() {
    static int a = 5;
    a++;
    return a;
}

main() {
    a = func1();
    printf("%d", a); // 6
    a = func1();
    printf("%d", a); // 7
}
```