

# Hack postgres Source Code: Vol I

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## Chapter 1 : C & Rust

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### 1.6 for loop in analyze.c in postgres 's parser

Cut to Go's Notebook page -

**C:**

```
#include<stdio.h>

int
main() {

    int sublist_length = 10;

    for(int i = 0; i < sublist_length; i++) {

        printf("%d\n", i);
    }

    return 0;

}
```

**Rust:**

```
fn main() {

    let sublist_length: i32 = 10;

    for i in (0..sublist_length).step_by(1) {
        println!("{}", i);
    }

}
```

**Observations:**

1. C and Rust follows different for loop syntax.
2. In C, loop variable type is set explicitly. In Rust, type of loop variable is inferred from lower or upperbound of loop's range. If there is no explicit type on lower or upper bound then the default `i:32` is applied implicitly.