

Hack postgres Source Code: Vol I

Chapter 1 : C & Rust

1.21 Common Collection - Hash Map in Rust.

Hash Map in rust is seen in another programming languages with different names such as dictionary in python and Hash Map/Tree Map in java.

To use Hash Map in rust, we need use it from standard library just like importing built-in modules from python.

```
// Using hash map from standard library
use std::collections::HashMap;

fn main() {

    // Create mutable hash map.
    let mut hash_map = HashMap::new();

    // Create key value pairs to store in hash map.
    let emp_101_id: i32 = 101;
    let emp_101_name: String = String::from("John");

    // Storing in hash map
    hash_map.insert(emp_101_id, emp_101_name);

    /*
    * Note: After inserting `emp_101_id`, `emp_101_name`
    * into hash map, we can't use those variables further
    * because of ownership system rules. Just like vector,
    * hash map also stores data in heap.
    */

    // Traversing hash map
    for (key, value) in &hash_map {
        println!("{}", key, value);
    }
}
```