

# Hashing

## Code :

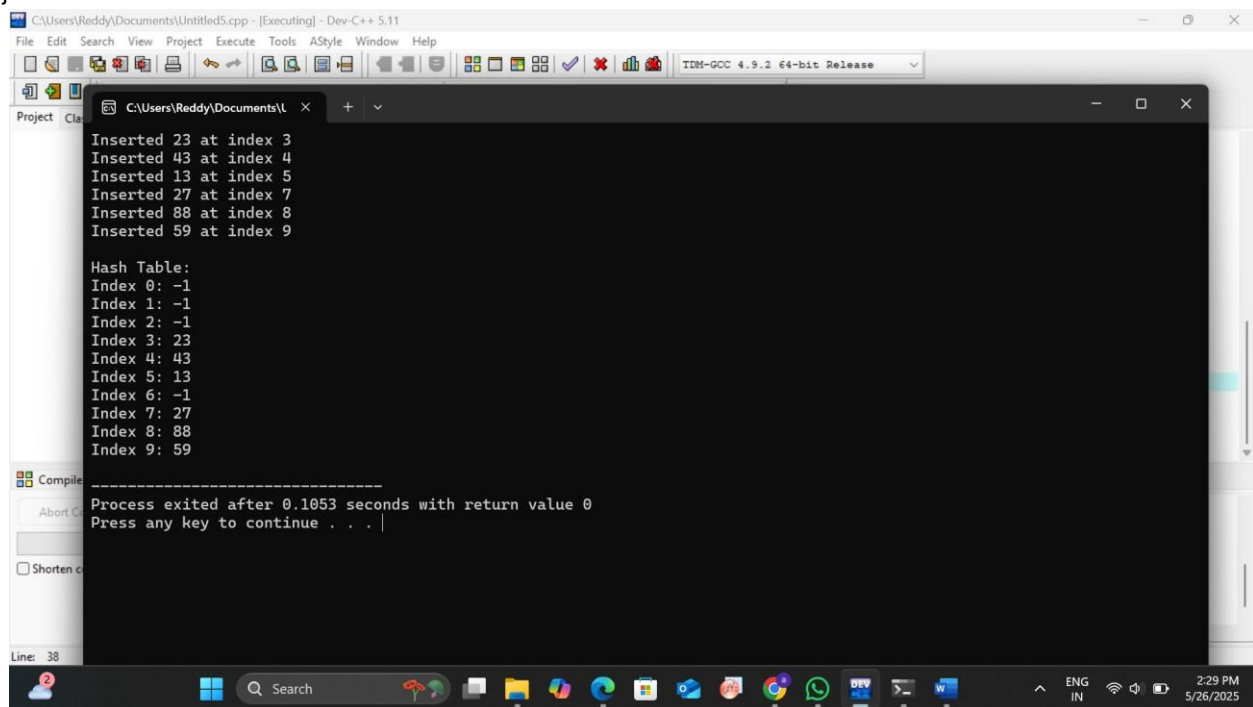
```
#include <stdio.h> #define
SIZE 10 int
hashTable[SIZE]; void init()
{   for (int i = 0; i < SIZE;
i++)    hashTable[i] = -1;
}
int hash(int key) {
return key % SIZE;
}
void insert(int key) {
int index = hash(key);
    int i = 0;    while (hashTable[(index + i) %
SIZE] != -1) {
        i++;    if (i == SIZE) {
printf("Hash table is full!\n");
return;
        }
    }
    hashTable[(index + i) % SIZE] = key;    printf("Inserted %d
at index %d\n", key, (index + i) % SIZE);
}
void display() {    printf("\nHash Table:\n");
for (int i = 0; i < SIZE; i++)    printf("Index
%d: %d\n", i, hashTable[i]); }
```

```

int main() { int keys[] = {23, 43, 13,
27, 88, 59}; int n = sizeof(keys) /
sizeof(keys[0]);

init(); for (int i = 0; i
< n; i++)
insert(keys[i]);
display(); return 0;
}

```



The screenshot shows a C++ IDE with the following output in the console window:

```

Inserted 23 at index 3
Inserted 43 at index 4
Inserted 13 at index 5
Inserted 27 at index 7
Inserted 88 at index 8
Inserted 59 at index 9

Hash Table:
Index 0: -1
Index 1: -1
Index 2: -1
Index 3: 23
Index 4: 43
Index 5: 13
Index 6: -1
Index 7: 27
Index 8: 88
Index 9: 59

```

Below the hash table output, the console shows the process completion message:

```

-----
Process exited after 0.1053 seconds with return value 0
Press any key to continue . . .

```

The IDE interface includes a menu bar (File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help), a toolbar, and a status bar at the bottom showing the system clock as 2:29 PM on 5/26/2025.