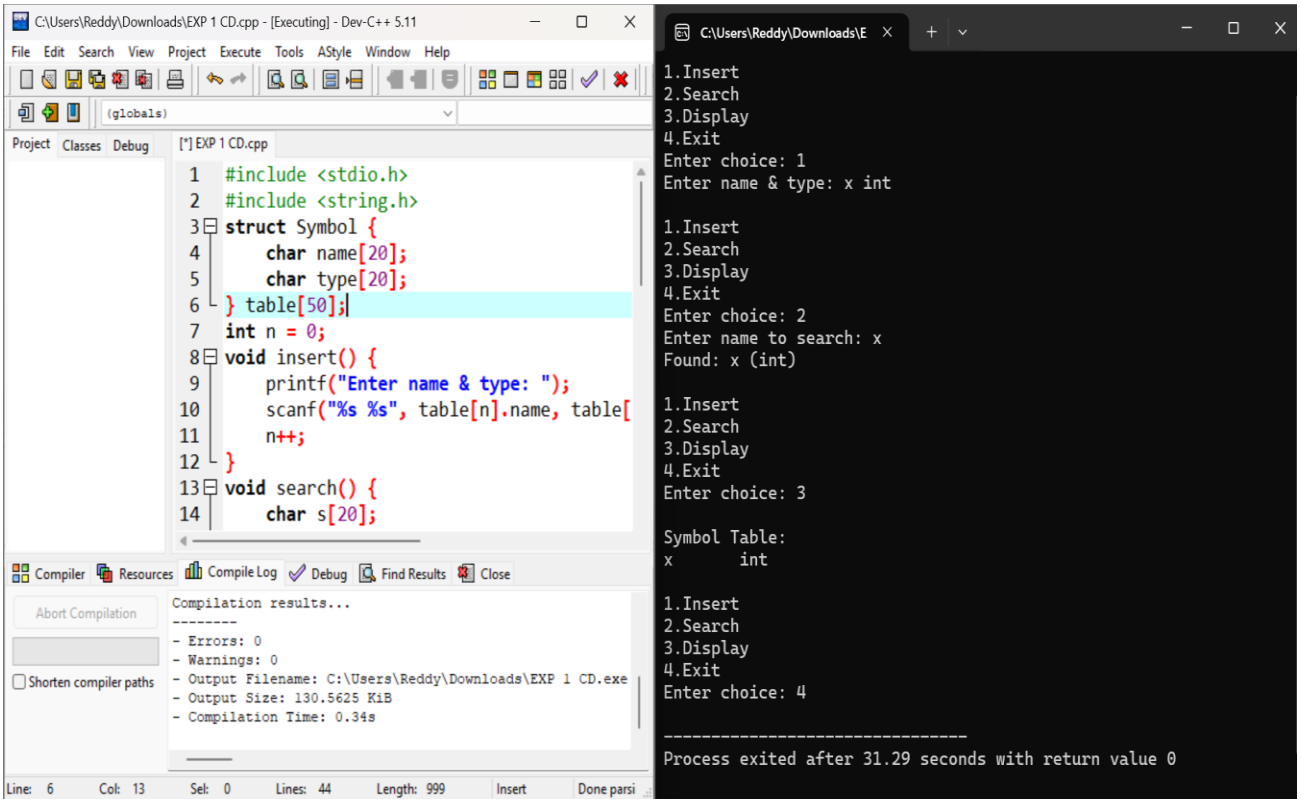
8. C Program for Symbol Table Operations

```
#include <stdio.h>
#include <string.h>
struct Symbol {
    char name[20];
    char type[20];
} table[50];
int n = 0;
void insert() {
    printf("Enter name & type: ");
    scanf("%s %s", table[n].name, table[n].type);
    n++;
}
void search() {
    char s[20];
    printf("Enter name to search: ");
    scanf("%s", s);
    for (int i = 0; i < n; i++)
        if (!strcmp(s, table[i].name)) {
            printf("Found: %s (%s)\n", table[i].name, table[i].type);
            return;
        }
    printf("Not Found\n");
}

void display() {
    printf("\nSymbol Table:\n");
    for (int i = 0; i < n; i++)
        printf("%s\t%s\n", table[i].name, table[i].type);
```

```
}
int main() {
    int ch;
    while (1) {
        printf("\n1.Insert\n2.Search\n3.Display\n4.Exit\nEnter choice: ");
        scanf("%d", &ch);
        if (ch == 1) insert();
        else if (ch == 2) search();
        else if (ch == 3) display();
        else break;
    }
    return 0;
}
```

Output: