

```

5- #include <stdio.h>

int main() {
    int L, a, b, c, d;
    int n1, n2;

    printf("Enter the limit (max cube root): ");
    scanf("%d", &L);

    printf("Ramanujan Numbers up to limit %d:\n", L);

    for (a = 1; a <= L; a++) {
        for (b = a; b <= L; b++) {
            n1 = a * a * a + b * b * b;

            for (c = a + 1; c <= L; c++) {
                for (d = c; d <= L; d++) {
                    n2 = c * c * c + d * d * d;

                    if (n1 == n2) {
                        printf("%d = %d^3 + %d^3 = %d^3\n", n1, a, b, c, d);
                    }
                }
            }
        }
    }

    return 0;
}

```


Go Forward (^⌘-)

C main.c > main()

```

1  #include <stdio.h>
2
3  int main() {
4      int L, a, b, c, d;
5      int n1, n2;
6
7      printf("Enter the limit (max cube root value): ");
8      scanf("%d", &L);
9
10     printf("Ramanujan Numbers up to limit %d:\n", L);
11
12     // Check all combinations of cubes
13     for (a = 1; a <= L; a++) {
14         for (b = a; b <= L; b++) {
15             n1 = a*a*a + b*b*b; // First sum of cubes
16
17             for (c = a+1; c <= L; c++) {
18                 for (d = c; d <= L; d++) {
19                     n2 = c*c*c + d*d*d; // Second sum of cubes
20
21                     if (n1 == n2) {
22                         printf("%d = %d^3 + %d^3 = %d^3 + %d^3\n",
23                             n1, a, b, c, d);
24                     }
25                 }
18

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

• abhaygupta@Abhays-MacBook-Air main.c % gcc main.c
• abhaygupta@Abhays-MacBook-Air main.c % ./a.out
Enter the limit (max cube root value): 45
Ramanujan Numbers up to limit 45:
1729 = 1^3 + 12^3 = 9^3 + 10^3
4104 = 2^3 + 16^3 = 9^3 + 15^3
13832 = 2^3 + 24^3 = 18^3 + 20^3
39312 = 2^3 + 34^3 = 15^3 + 33^3
46683 = 3^3 + 36^3 = 27^3 + 30^3
32832 = 4^3 + 32^3 = 18^3 + 30^3
40033 = 9^3 + 34^3 = 16^3 + 33^3
20683 = 10^3 + 27^3 = 19^3 + 24^3
65728 = 12^3 + 40^3 = 31^3 + 33^3
64232 = 17^3 + 39^3 = 26^3 + 36^3
• abhaygupta@Abhays-MacBook-Air main.c %

```

Ln 23, Col 17