

#include <stdio.h>

int main () {

int a,b,c,d ;

int limit = 10000

printf ("Ramseyan numbers up to %d : \n", limit)

for (a=1 ; a*a*a <= limit ; a++)

for (b=a ; b*b*b <= limit ; b++)

for (c=a+1 ; c*c*c <= limit ; c++)

for (d=c ; d*d*d <= limit ; d++)

if ((a*a*a + b*b*b == c*c*c + d*d*d) && (a*a*a +
b*b*b , a,b,c,d));

return 0; }

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main.c

Output

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```
1 #include <stdio.h>
2 int main() {
3     int a,b,c,d;
4     int limit = 10000;
5
6     printf("Ramanujan numbers up to %d:\n", limit);
7
8     for (a = 1; a * a * a <= limit; a++)
9     for (b = a; b * b * b <= limit; b++)
10    for (c = a + 1; c * c * c <= limit; c++)
11    for (d = c; d * d * d <= limit; d++)
12    if ( a*a*a + b*b*b == c*c*c + d*d*d && a*a*a + b*b*b <= limit)
13        printf("%d = %d^3 + %d^3 = %d^3 + %d^3\n ",a*a*a + b*b*b, a,b,c,d
14    );
15 }
```

Ramanujan numbers up to 10000:
1729 = 1^3 + 12^3 = 9^3 + 10^3
4104 = 2^3 + 16^3 = 9^3 + 15^3

== Code Execution Successful ==

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