Find all natural numbers belonging to the segment [35,000,000; 40,000,000], which have exactly five different odd divisors (the number of even divisors can be any). In the answer, list the numbers found in ascending order

```
#include <iostream>
#include <cstdio>
#include <cstdlib>
#include <ctime>
#include <cmath>
#define SIZE 19

using namespace std;
int prime_test(long long int impostor_or_crewmate)
{
    int flag;
    double g;
    g=sqrt(impostor_or_crewmate);
    flag=0;
    long long int i=2;
    while(i<=g && flag==0)
    {
        if(impostor_or_crewmate%i==0)
        {
            flag=1;
            break;
        }
        i++;
    }
    if(flag==0)
    {
        return 0;
    }
    else
    {
        return 1;
    }
}

void finding_numbers_that_we_need(int competitor_to_be_the_chosen_one)
{
    int g, g1, Luke_Skywalker;
    Luke_Skywalker=competitor_to_be_the_chosen_one;
    while(competitor_to_be_the_chosen_one%2==0)
    {
        competitor_to_be_the_chosen_one=competitor_to_be_the_chosen_one/2;
    }
    if(competitor_to_be_the_chosen_one!=1)
    {
        g=sqrt(competitor_to_be_the_chosen_one);
        g=sqrt(g);
        g1=g*g*g*g;
        if(g1==competitor_to_be_the_chosen_one)
        {
            if(prime_test(g)==0)
            {
                printf("%d\n", Luke_Skywalker);
            }
        }
    }

}
int main()
{
    int start=20;
    while(start<=40000000)
    {
        finding_numbers_that_we_need(start);
        start++;
    }
  return 0;
}

/*35819648
38950081
39037448
39337984*/
```