

```
#include <stdio.h>
#include <math.h>

int main(){
    int num, i, divisor;
    scanf("%d", &num);

    // num is definitely a divisor of num
    divisor = num;
    // check if smaller numbers are divisors too
    // don't go all the way till one, stop at 2
    for(i = num; i > 1; i--){
        if(num % i == 0)
            divisor = i;
    }

    if(num == divisor)
        printf("%d\nPRIME",divisor);
    else
        printf("%d\nCOMPOSITE",divisor);
    return 0;
}
```