

Computer Programming (I)

Homework 4

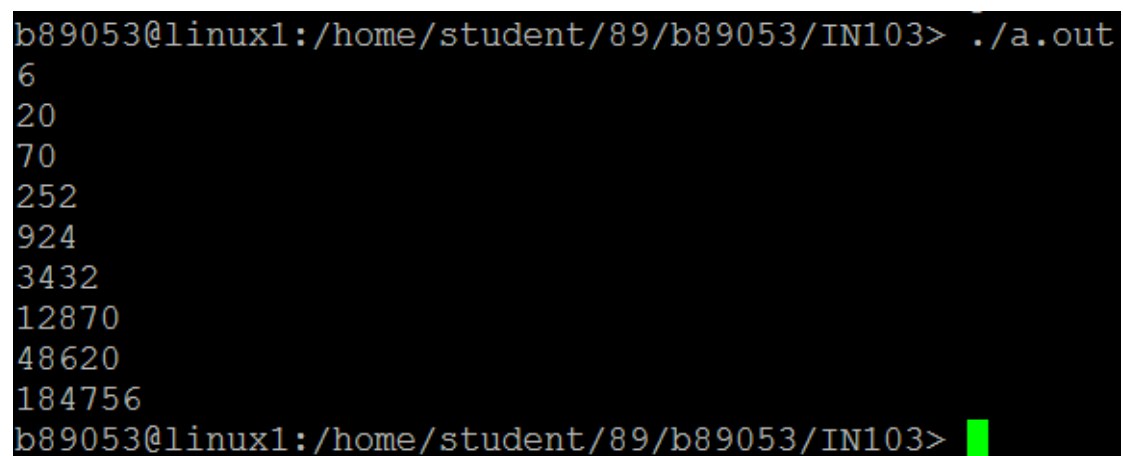
Problem Statement

Please write a function, `foo`, that takes an even integer $2 \leq n \leq 20$ and returns the number of size- $(n/2)$ subsets of $\{1, 2, \dots, n\}$. Your main function should be exactly as follows:

```
int main()
{
    cout << foo( 4 ) << '\n'; // 6
    cout << foo( 6 ) << '\n'; // 20
    cout << foo( 8 ) << '\n'; // 70
    cout << foo( 10 ) << '\n'; // 252
    cout << foo( 12 ) << '\n'; // 924
    cout << foo( 14 ) << '\n'; // 3432
    cout << foo( 16 ) << '\n'; // 12870
    cout << foo( 18 ) << '\n'; // 48620
    cout << foo( 20 ) << '\n'; // 184756
}
```

The correct outputs are shown in the comments of the main function above.

My Screenshot



```
b89053@linux1:/home/student/89/b89053/IN103> ./a.out
6
20
70
252
924
3432
12870
48620
184756
b89053@linux1:/home/student/89/b89053/IN103> █
```