

# In-class assignment (due at 11:20AM, 03/05)

- Suppose you want to move an object from the origin to a position that has a distance,  $x$  units (a positive integer), from the origin. Each time you can move only 1 or 2 units. Please write a program to print in how many distinct ways you can move the object to the position.  $x$  is provided during runtime. For example,
  - If  $x = 2$ , then your program should print 2, because there are 2 ways:  
(1)  $1 + 1$  and (2)  $2$
  - If  $x = 4$ , then your program should print 5, because there are 5 ways:  
(1)  $1 + 1 + 1 + 1$ , (2)  $1 + 1 + 2$ , (3)  $1 + 2 + 1$ , (4)  $2 + 1 + 1$ , and (5)  $2 + 2$