Programming Assignment 4 Requirements

* Program1  
  You have to implement three versions of the Fibonacci.  
  (1) fib\_recursive (2) fib\_memoize (3) fib\_bottom\_up
* Program2

1. top-down (2)bottom-up

* Upload  
  **Please upload your code to E3 as well as judge system.**On E3, place your code and answers into a directory named [your student ID],  
  e.g.   
     0123456/hw4\_1.cpp   
     0123456/hw4\_2.cpp  
   0123456/hw4\_3.cpp

0123456/hw4\_4.cpp

0123456/hw4\_5.cpp

then pack your code and answers into an ZIP file. (Notice: Please make sure it is ZIP.)  
On judge system, the problem number are 3-1, 3-2, 3-3, 3-4, 3-5.

* Sample I/O
  + Input format for part 1. There are several lines in the input file. Each line represent the order i. Please output the value of ith of Fibonacci numbers

**Sample Input:**

2

3

4

**Sample Output:**

1

2

3

* + Input format for part 2. There are three lines for each testing data. First line is the length of wood. Second line is how many positions must be cut. Third line are the values of these positions. Please output the answer with format **Minimum cost : X.** Where X is the minimum cost.

**Sample Input:**

100

3

25 50 75

100

4

17 23 37 53

**Sample Output:**

Minimum cost : 200

Minimum cost : 206