1. Write the function that finds the maximum element of the given list.
2. Write the function that finds the maximum $n$th element of the given list.
3. 

a. Write a function that opens a file and writes the key-value pairs (dictionary) according to following rules:

- Function takes $n$ as input and key value pairs for each line of the file.
- You must implement a function that computes modular operation instead of using built-in python function (\%).

| n | key | value |
| :--- | :--- | :--- |
| 1 | 10 | $3(=10 \% 7)$ |
| 2 | 20 | $6(=10 \% 7)$ |
| 3 | 30 | $2(=10 \% 7)$ |
| 4 | 40 | $5(=10 \% 7)$ |
| 5 | 50 | $1(=10 \% 7)$ |

b. Read your previous file and create a dictionary that holds these key-value pairs.
4. Write a function fibonacci_dict to create key-value pairs (dictionary) as described below:

$$
\begin{aligned}
& \text { fibonacci_dict(n) } \\
& \text { keys: } 1, \ldots, n
\end{aligned} \quad \text { values: } 0,1,1,2,3, \ldots ., f_{-} n .
$$

Fibonacci series:

$$
F_{n}=F_{(n-1 \mid}+F_{(n-2)}
$$

