## 5.Extract Increasing Subset from Array

Write a function that extracts only those numbers that **form a** **non-decreasing subset**. In other words, you start from the **first element** and continue to **the end** of the **given array of numbers**. Any number which is **LESS THAN** the **current biggest one** is **ignored**, alternatively if it’s equal or higher than the **current biggest one** you set it as the **current biggest one** and you continue to the next number.

The **input** comes as an **array of numbers**.

The **output** is the processed array after the filtration, which should be a non-decreasing subset. Return the **array of numbers**.

### Examples

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| **[1,**  **3,**  **8,**  **4,**  **10,**  **12,**  **3,**  **2,**  **24]** | **[1, 3, 8, 10, 12, 24]** |  | **[1,**  **2,**  **3,**  **4]** | **[1, 2, 3, 4]** | **[20,**  **3,**  **2,**  **15,**  **6,**  **1]** | **[20]** |