21.Dekning eng orqa elementini ko‘rish: Dekning orqasidagi eng yuqori elementini ko‘rsatish.

```
#include <iostream>
#include <deque>

int main() {

    std::deque<int> dq;
    dq.push_back(10);     dq.push_back(20);
    dq.push_back(30);
    dq.push_back(40);


    if (!dq.empty()) {
        std::cout << "Dekning orqa tomondagi eng yuqori
element: " << dq.back() << std::endl;
    } else {
        std::cout << "Dek bo'sh!" << std::endl;
    }

    return 0;
}
```

problem.cpp problem2.cpp

problem2.cpp > ...

```cpp
#include <iostream>
#include <deque>

int main() {

    std::deque<int> dq;
    dq.push_back(10);     dq.push_back(20);
    dq.push_back(30);
    dq.push_back(40);


    if (!dq.empty()) {
        std::cout << "Dekning orqa tomondagi eng yuqori element: " << dq.back() << std::endl;
    } else {
        std::cout << "Dek bo'sh!" << std::endl;
    }

    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
jaxon@jaxon-Lenovo-V15-G3-IAP:~/home$ cd "/home/jaxon/home/" && g++ problem2.cpp -o problem2 && "/h
Dekning orqa tomondagi eng yuqori element: 40
jaxon@jaxon-Lenovo-V15-G3-IAP:~/home$
```

21. Ro'yxatni ajratish
Nazariy: Ro'yxatni ikki qismga ajratish.
Amaliy: Ro'yxatni ajratish.

Nazariy qism:
Ro'yxatni ikki qismga ajratish:

Ro'yxatni ikki qismga ajratish - bu dasturlashda keng tarqalgan vazifalardan biridir. Bu jarayon ro'yxatni (yoki massivni) ikkiga ajratishdan iborat bo'lib, odatda bunday ajratish quyidagi sabablarga ko'ra amalga oshiriladi:

Qidiruv: Ikki qismga ajratilgan ro'yxatda qidiruv jarayonini tezlashtirish.

Sortlash: Ro'yxatni ajratish orqali tezroq sortlashni amalga oshirish.

Ma'lumotlarni tahlil qilish: Ro'yxatning bir qismida bir ma'lumot turini, ikkinchi qismida esa boshqa turini saqlash.

Amaliy qism:

problem.cpp

```cpp
#include <iostream>
#include <vector>

void splitList(const std::vector<int>& list) {
    int n = list.size();
    int mid = n / 2;

    std::vector<int> firstHalf(list.begin(), list.begin() + mid);
    std::vector<int> secondHalf(list.begin() + mid, list.end());

    std::cout << "Chap qism: ";
    for (int num : firstHalf) {
        std::cout << num << " ";
    }
    std::cout << std::endl;

    std::cout << "O'ng qism: ";
    for (int num : secondHalf) {
        std::cout << num << " ";
    }
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

cd "/home/jaxon/home/" && g++ problem.cpp -o problem && "/home/jaxon/home/"problem
jaxon@jaxon-Lenovo-V15-G3-IAP:~/home$ cd "/home/jaxon/home/" && g++ problem.cpp -o problem && "/hom
Chap qism: 1 2 3
O'ng qism: 4 5 6
jaxon@jaxon-Lenovo-V15-G3-IAP:~/home$
```

```
#include <iostream>
#include <vector>

void splitList(const std::vector<int>& list) {
    int n = list.size();
    int mid = n / 2;

    std::vector<int> firstHalf(list.begin(), list.begin() + mid);
    std::vector<int> secondHalf(list.begin() + mid, list.end());

    std::cout << "Chap qism: ";
    for (int num : firstHalf) {
        std::cout << num << " ";
    }
    std::cout << std::endl;

    std::cout << "O'ng qism: ";
    for (int num : secondHalf) {
        std::cout << num << " ";
    }
    std::cout << std::endl;
}

int main() {
    std::vector<int> myList = {1, 2, 3, 4, 5, 6};
    splitList(myList);
    return 0;
}
```