

## 01 firstLast6

```
public boolean firstLast(int[] nums) {
    boolean answer = false;

    int len = nums.length;
    int first = nums[0];
    int last = nums[len-1];

    if (first == 6) {
        answer = true;
    }

    if (last == 6) {
        answer = true;
    }

    return answer;
}

public boolean firstLast6(int[] nums) {
    boolean answer = false;

    int len = nums.length;
    int first = nums[0];
    int last = nums[len-1];

    if (first == 6 || last == 6) {
        answer = true;
    }

    return answer;
}
```

## 02 sameFirstLast

```
public boolean sameFirstLast(int[] nums) {
    boolean answer = false;

    int len = nums.length;

    if (len >= 1) {
        int first = nums[0];
        int last = nums[len-1];

        if (first == last) {
            answer = true;
        }
    }

    return answer;
}
```

### 03 makePi

```
public int[] makePi() {  
    int[] list = new int[3];  
  
    list[0] = 3;  
    list[1] = 1;  
    list[2] = 4;  
  
    return list;  
}
```

```
public int[] makePi() {  
    int[] list = { 3, 1, 4 };  
    return list;  
}
```

```
public int[] makePi() {  
    int[] list = new int[] { 3, 1, 4 };  
    return list;  
}
```

## 04 commonEnd

```
public boolean commonEnd(int[] a, int[] b) {
    boolean answer = false;

    int firstA = a[0];
    int firstB = b[0];

    int lenA = a.length;
    int lenB = b.length;

    int lastA = a[lenA-1];
    int lastB = b[lenB-1];
    if (firstA == firstB || lastA == lastB) {
        answer = true;
    }

    return answer;
}
```

```
public boolean commonEnd(int[] a, int[] b) {
    boolean answer = false;

    int firstA = a[0];
    int firstB = b[0];
    if (firstA == firstB) {
        answer = true;
    }

    int lenA = a.length;
    int lenB = b.length;

    int lastA = a[lenA-1];
    int lastB = b[lenB-1];
    if (lastA == lastB) {
        answer = true;
    }

    return answer;
}
```

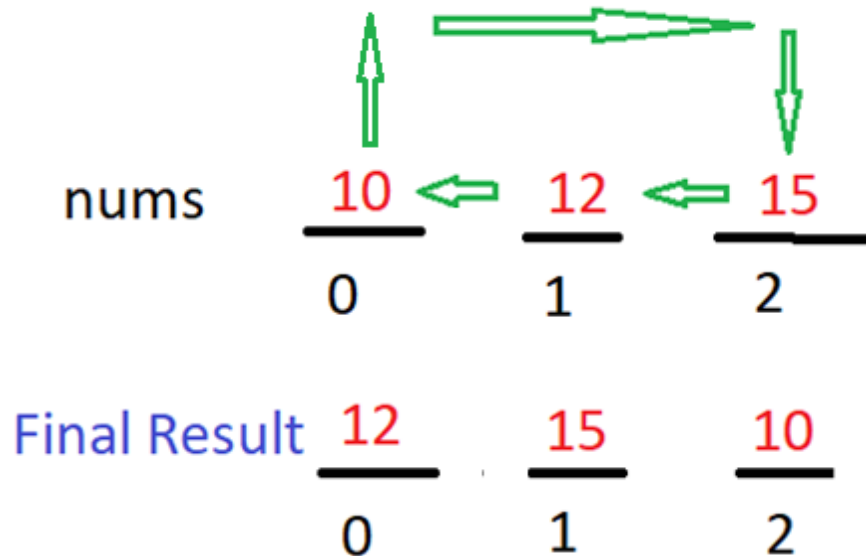
## 05 sum3

```
public int sum3(int[] nums) {  
    int first = nums[0];  
    int second = nums[1];  
    int third = nums[2];  
  
    int sum = first + second + third;  
    return sum;  
}
```

## 06 rotateLeft3

```
public int[] rotateLeft3(int[] nums) {  
    int[] list = new int[3];  
  
    int first = nums[0];  
    int second = nums[1];  
    int third = nums[2];  
  
    list[0] = second;  
    list[1] = third;  
    list[2] = first;  
    return list;  
}
```

```
public int[] rotateLeft3(int[] nums) {  
    int first = nums[0];  
    int second = nums[1];  
    int third = nums[2];  
  
    int[] list = { second, third, first };  
  
    return list;  
}
```



## 07 reverse3

```
public int[] reverse3(int[] nums) {
    int first = nums[0];
    int second = nums[1];
    int third = nums[2];

    int[] list = { third, second, first };
    return list;
}
```

```
public int[] reverse3(int[] nums) {
    int first = nums[0];
    int second = nums[1];
    int third = nums[2];

    int[] list = new int[3];
    list[0] = third;
    list[1] = second;
    list[2] = first;
    return list;
}
```

## 08 maxEnd3

```
public int[] maxEnd3(int[] nums) {
    int first = nums[0];
    int last = nums[2];
    int larger = Math.max( first, last );

    int[] list = { larger, larger, larger };
    return list;
}
```

```
public int[] maxEnd3(int[] nums) {
    int[] list = new int[3];

    int first = nums[0];
    int last = nums[2];
    int larger = Math.max( first, last );

    list[0] = larger;
    list[1] = larger;
    list[2] = larger;

    return list;
}
```



## 09 sum2

```
public int sum2(int[] nums) {
    int first = 0; // default empty list
    int second = 0; // default empty list
    int len = nums.length;

    if (len == 1) {
        first = nums[0];
    }

    if (len >= 2) {
        first = nums[0];
        second = nums[1];
    }

    int sum = first + second;;
    return sum;
}
```

## 10 middleWay

```
public int[] middleWay(int[] a, int[] b) {  
    int middleA = a[1];  
    int middleB = b[1];  
    int[] list = { middleA, middleB };  
    return list;  
}
```

```
public int[] middleWay(int[] a, int[] b) {  
    int[] list = new int[2];  
  
    int middleA = a[1];  
    int middleB = b[1];  
  
    list[0] = middleA;  
    list[1] = middleB;  
    return list;  
}
```

## 11 makeEnds

```
public int[] makeEnds(int[] nums) {  
    int[] list = new int[2];  
  
    int len = nums.length;  
    int first = nums[0];  
    int last = nums[len-1];  
  
    list[0] = first;  
    list[1] = last;  
    return list;  
}
```

```
public int[] makeEnds(int[] nums) {  
    int len = nums.length;  
    int first = nums[0];  
    int last = nums[len-1];  
  
    int[] list = { first, last };  
    return list;  
}
```

## 12 has23

```
public boolean has23(int[] nums) {
    boolean answer = false;

    int first = nums[0];
    if (first == 2 || first == 3) {
        answer = true;
    }

    int second = nums[1];
    if (second == 2 || second == 3) {
        answer = true;
    }

    return answer;
}
```

### 13 no23

```
public boolean no23(int[] nums) {
    boolean answer = false;

    if ( !has23( nums) ) {
        answer = true;
    }

    return answer;
}

// RE-USE METHOD from Previous Problem
public boolean has23(int[] nums) {
    boolean answer = false;

    int first = nums[0];
    if (first == 2 || first == 3) {
        answer = true;
    }

    int second = nums[1];
    if (second == 2 || second == 3) {
        answer = true;
    }

    return answer;
}
```

## 14 makeLast

```
public int[] makeLast(int[] a) {  
    int lenA = a.length;  
    int lastA = a[lenA-1];  
  
    int lenB = lenA * 2;  
    int[] b = new int[lenB];  
  
    b[lenB-1] = lastA;  
  
    return b;  
}
```

## 15 double23

```
public boolean double23(int[] nums) {
    boolean answer = false;
    int len = nums.length;
    if (len == 2) {
        int first = nums[0];
        int second = nums[1];
        if (first == 2 && second == 2) {
            answer = true;
        }
        if (first == 3 && second == 3) {
            answer = true;
        }
    }
    return answer;
}
```

```
public boolean double23(int[] nums) {
    boolean answer = false;
    int len = nums.length;
    if (len == 2) {
        int first = nums[0];
        int second = nums[1];
        if (first == second) {
            if (first == 2 || first == 3) {
                answer = true;
            }
        }
    }
    return answer;
}
```

```
public boolean double23(int[] nums) {
    boolean answer = false;
    int len = nums.length;
    if (len == 2) {
        int first = nums[0];
        int second = nums[1];
        if ( first == second && (first == 2 || first == 3) ) {
            answer = true;
        }
    }
    return answer;
}
```

## 16 fix23

```
public int[] fix23(int[] nums) {
    int first = nums[0];
    int second = nums[1];
    int third = nums[2];

    if (first == 2 && second == 3) {
        nums[1] = 0;
    }

    if (second == 2 && third == 3) {
        nums[2] = 0;
    }

    return nums;
}
```



## 17 start1

```
public int start1(int[] a, int[] b) {
    int count = 0;

    int lenA = a.length;
    if (lenA > 0) {
        int firstA = a[0];
        if (firstA == 1) {
            count = count + 1;
        }
    }

    int lenB = b.length;
    if (lenB > 0) {
        int firstB = b[0];
        if (firstB == 1) {
            count = count + 1;
        }
    }

    return count;
}
```

## 18 biggerTwo

```
public int[] biggerTwo(int[] a, int[] b) {
    int[] list = new int[2];

    int firstA = a[0];
    int secondA = a[1];
    int sumA = firstA + secondA;

    int firstB = b[0];
    int secondB = b[1];
    int sumB = firstB + secondB;

    if (sumA > sumB) {
        list = a;
    }
    if (sumB > sumA) {
        list = b;
    }
    if (sumA == sumB) {
        list = a;
    }

    return list;
}
```

## 19 makeMiddle

```
public int[] makeMiddle(int[] nums) {

    int len = nums.length;
    int mid = len / 2;

    int firstMiddle = nums[mid-1];
    int secondMiddle = nums[mid];

    int[] list = { firstMiddle, secondMiddle };

    return list;
}

public int[] makeMiddle(int[] nums) {
    int[] list = new int[2];

    int len = nums.length;
    int mid = len / 2;

    int firstMiddle = nums[mid-1];
    int secondMiddle = nums[mid];
    list[0] = firstMiddle;
    list[1] = secondMiddle;

    return list;
}
```

## 20 plusTwo

```
public int[] plusTwo(int[] a, int[] b) {
    int[] c = new int[4];

    int firstA = a[0];
    int secondA = a[1];
    int firstB = b[0];
    int secondB = b[1];

    c[0] = firstA;
    c[1] = secondA;
    c[2] = firstB;
    c[3] = secondB;

    return c;
}
```

## 21 swapEnds

```
public int[] swapEnds(int[] nums) {  
    int len = nums.length;  
  
    int first = nums[0];  
    int last = nums[len-1];  
  
    nums[0] = last;  
    nums[len-1] = first;  
  
    return nums;  
}
```

## 22 midThree

```
public int[] midThree(int[] nums) {  
  
    int len = nums.length;  
    int mid = len / 2;  
  
    int beforeMiddle = nums[mid-1];  
    int middle = nums[mid];  
    int afterMiddle = nums[mid+1];  
    int[] list = { beforeMiddle, middle, afterMiddle };  
    return list;  
}
```

```
public int[] midThree(int[] nums) {  
    int[] list = new int[3];  
  
    int len = nums.length;  
    int mid = len / 2;  
  
    int beforeMiddle = nums[mid-1];  
    int middle = nums[mid];  
    int afterMiddle = nums[mid+1];  
  
    list[0] = beforeMiddle;  
    list[1] = middle;  
    list[2] = afterMiddle;  
  
    return list;  
}
```

## 23 maxTriple

```
public int maxTriple(int[] nums) {
    int len = nums.length;
    int mid = len / 2;

    int first = nums[0];
    int last = nums[len-1];
    int middle = nums[mid];

    int largestFL = Math.max( first, last );
    int largestFLM = Math.max( largestFL, middle );

    return largestFLM;
}
```

## 24 frontPiece

```
public int[] frontPiece(int[] nums) {
    int len = nums.length;
    int size = Math.min(2, len);
    int[] list = new int[size];

    if (len == 1) {
        int first = nums[0];
        list[0] = first;
    }
    if (nums.length >= 2) {
        int first = nums[0];
        int second = nums[1];
        list[0] = first;
        list[1] = second;
    }

    return list;
}

public int[] frontPiece(int[] nums) {
    int[] list = { };

    int len = nums.length;
    if (len == 1) {
        int first = nums[0];
        list = new int[] { first }; // reinitialize
    }
    if (nums.length >= 2) {
        list = new int[2];
        int first = nums[0];
        int second = nums[1];
        list = new int[] { first, second }; // reinitialize
    }
    return list;
}
```



## 25 unlucky1

```
public boolean unlucky1(int[] nums) {
    boolean unlucky = false;
    int len = nums.length;

    if (len >= 2) {
        int first = nums[0];
        int second = nums[1];
        if (first == 1 && second == 3) {
            unlucky = true;
        }

        if (len >= 3) {
            int third = nums[2];
            if (second == 1 && third == 3) {
                unlucky = true;
            }
        }

        int last = nums[len-1];
        int secondToLast = nums[len-2];
        if (secondToLast == 1 && last == 3) {
            unlucky = true;
        }
    }

    return unlucky;
}
```

## 26 make2

```
public int[] make2(int[] a, int[] b) {
    int[] list = new int[2];
    int lenA = a.length;

    if (lenA >= 2) {
        int firstA = a[0];
        int secondA = a[1];
        list = new int[] { firstA, secondA }; // reinitialize
    }

    if (lenA == 1) {
        int firstA = a[0];
        int firstB = b[0];
        list = new int[] { firstA, firstB }; // reinitialize
    }

    if (lenA == 0) {
        int firstB = b[0];
        int secondB = b[1];
        list = new int[] { firstB, secondB }; // reinitialize
    }

    return list;
}
```

## 27 front11

```
public int[] front11(int[] a, int[] b) {
    int[] list = {};
    int lenA = a.length;
    int lenB = b.length;

    if (lenB == 0 && lenA >= 1) {
        int firstA = a[0];
        list = new int[] { firstA }; // reinitialize
    }

    if (lenA == 0 && lenB >= 1) {
        int firstB = b[0];
        list = new int[] { firstB }; // reinitialize
    }

    if (lenA >= 1 && lenB >= 1) {
        int firstA = a[0];
        int firstB = b[0];
        list = new int[] { firstA, firstB }; // reinitialize
    }

    return list;
}
```