Sum of 2 Array

Prob?

A → 4 1 2 6 (n1)

B → 1 7 5 (n2)

ans-C →

n1 > n2

$d = A(6) + 5 + 0 = 11$

$carry = 11 / 10 = 1$

```
int carry = 0;

int size =( n1 > n2) ? n1 : n2;
int [] ans = new int[size];

int i = n1-1;
int j = n2-1;    //B.length-1
int k = ans.length-1;

while(k>=0){
    int sum = 0;
    sum += carry;

    if(i>=0){
        sum += A[i];
    }

    if(j>=0){
        sum += B[j];
    }

    int val = sum%10;
    carry = sum/10;

    ans[k] = val;
    i--;
    j--;
    k--;

}

//computation done
//print
if(carry != 0){
    System.out.println(carry);
}

for(int ele : ans){
    System.out.println(ele);
}
```

logic →

A → n1

B → n2

n1 < n2

while(k≥0)

sum = 9+6+0 = 15

15 % 10 = 5

15 / 10 = 1

Difference of 2 Array

A → 2 6 4

B → 5 7 6

n1 > n2

1. size → n2
2. create ans
3. i, j, k

digit = B[j] + borrow

if (i≥0)

digit = digit − A[i]

if (digit < 0) { digit += 10; b = −1 } else { b = 0; }

```
public static int [] difference(int [] A, int [] B){
    int borrow = 0;
    int [] ans = new int[B.length];
    int i = A.length-1;
    int j = B.length-1;
    int k = ans.length-1;

    while(j>=0){
        int digit = 0;
        digit += B[j] + borrow;
        if(i >= 0){
            digit -= A[i];
        }

        if(digit < 0){
            digit += 10;
            borrow = -1;
        }
        else{
            borrow = 0;
        }
        ans[k] = digit;
        i--;
        j--;
        k--;

    }
    return ans;

}
```

563 − 563 = 000

```
int fnzi = -1;
for(int i = 0; i<ans.length; i++){
    if(ans[i] != 0){
        fnzi = i;
        break;
    }
}
//546-546 = 000
if(fnzi == -1){
    System.out.println("0");

}
else{
    for(int i = fnzi; i<ans.length; i++){
        System.out.println(ans[i]);
    }

}
```

fnzi = −1;

2 → ans.length

$x \% y =$

17 % 5

5 % 16 = 5

x % y = ?

0 — y−1

1 2 3 4 5 → k = 3

Hint

Amazon → UPSC

consistency