

## Array & Pattern

**Q1.** ISBN-10 identifiers are ten digits long. The first nine characters are digits 0-9. The last digit can be 0-9 or X, to indicate a value of 10. An ISBN-10 number is valid if the sum of the digits multiplied by their position modulo 11 equals zero.

**For example:**

```
ISBN : 1 1 1 2 2 2 3 3 3 9
position : 1 2 3 4 5 6 7 8 9 10
This is a valid ISBN, because:
```

$$(1*1 + 1*2 + 1*3 + 2*4 + 2*5 + 2*6 + 3*7 + 3*8 + 3*9 + 9*10) \% 11 = 0$$

**Examples**

```
1112223339 --> true
111222333 --> false
```

In [ ]:

**Q2.** Write Java Program to find sum of Array.

Example:

input:

```
x = {2,3,4,5,6,7,8,5,4}
```

output:

```
44
```

In [ ]:

**Q3.** Write Java Program to find index wise sum of two Array.

Example:

input:

```
x = {2,3,4,5,6,7,8,5,4}
y = {5,4,3,3,4,5,6,6,8}
```

output:

```
7, 7, 7, 8, 10, 12, 14, 11, 12
```

In [ ]:

**Q4** Write Java Program to find maximum,minimum values from Array.

**Example:**

Input:

```
num = {2,3,4,5,6,76,7,4}
```

Output:

```
minimum: 2  
maximum: 76
```

In [ ]:

**Q5.** Write the Java program to find duplicate values from Array.

**Example**

**Input:**

```
num = {3,4,5,6,7,6,54,45,4,3,7}
```

**Output:**

```
3 4 6 7
```

In [ ]:

**Q6.** Write the Java program to Print Triangle.

**Output**

```
  *  
 * *  
* * *  
* * * *  
* * * * *  
* * * * *
```

In [ ]:

**Q7.** Write the Java program to Print Reverse Of Pyramid.

**Output**

```
1 2 3 4 5 6  
2 3 4 5 6  
3 4 5 6  
4 5 6  
5 6  
6
```

**Q8.** Write the Java program to Print Numbers without re assigning.

**Output.**

```
1  
2 3  
4 5 6  
7 8 9 10  
11 12 13 14 15
```

In [ ]: