BIG DATA FRAMEWORKS CSE3120
LAB 1 (Java Practice)

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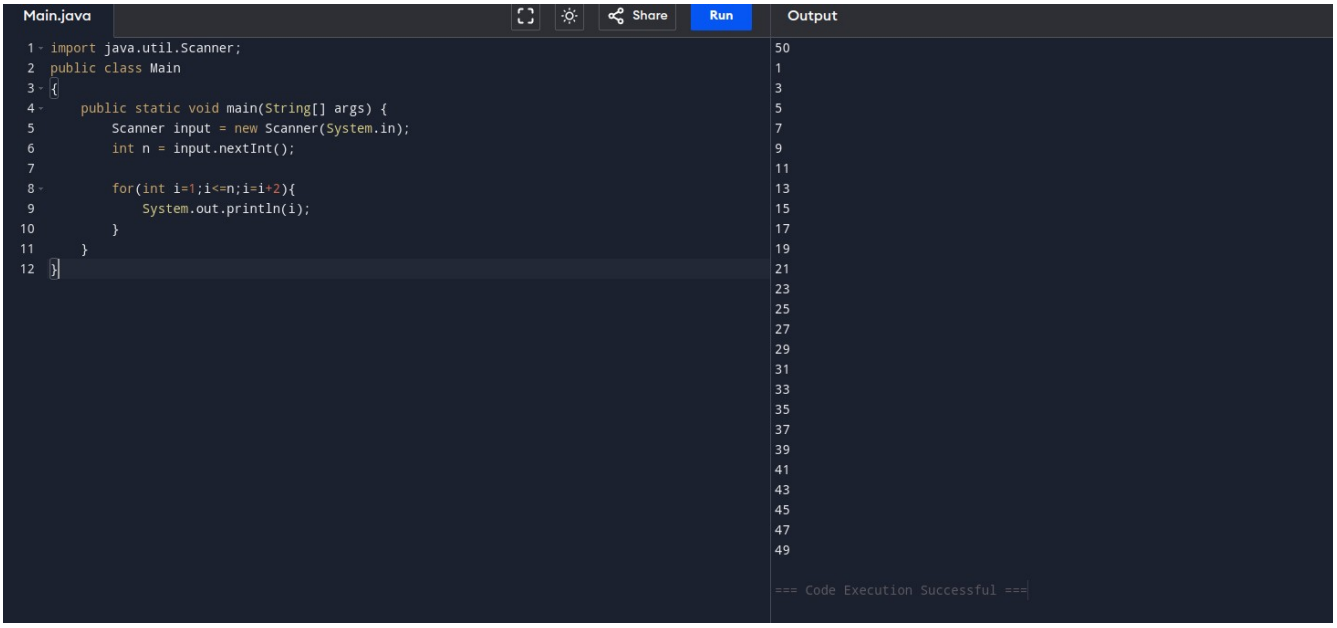
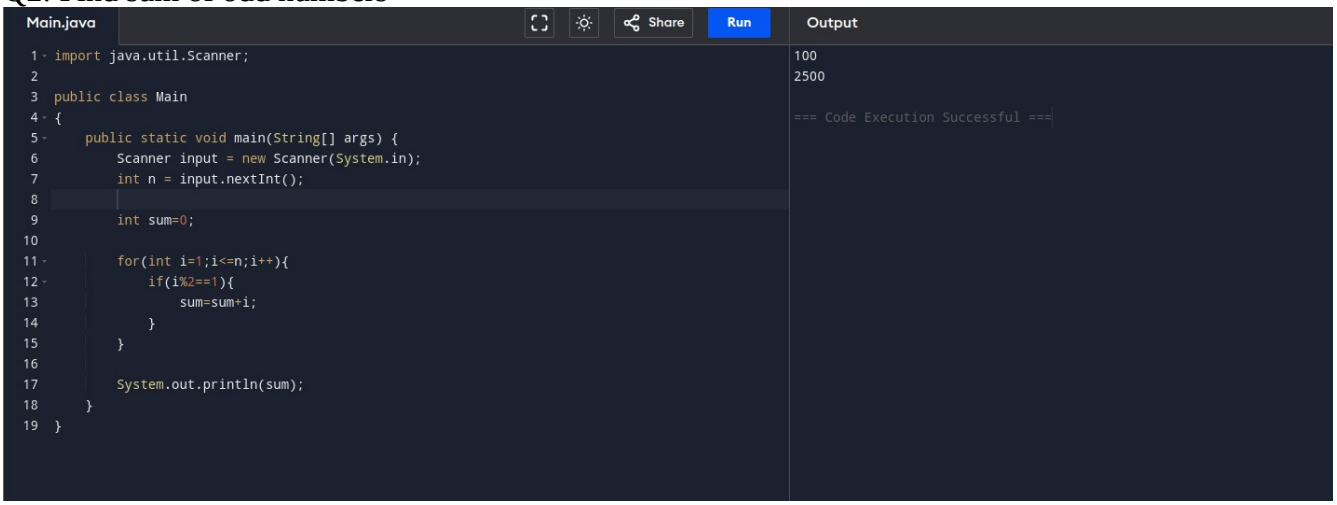
Q1: Find odd numbers



Q2: Find sum of odd numbers



Q3: Find if a number is palindrome

Main.java

```java
import java.util.Scanner;

class Main{
    public static void main(String[] args){
        Scanner in = new Scanner(System.in);

        int n= in.nextInt();
        int n_copy = n;

        int m = 0;


        while(n>0){
            m = 10*m + n%10;
            n = n/10;
        }
        System.out.println("N:"+n_copy+"\nM:"+m);
        if(n_copy==n){
            System.out.println("Palindrome!!!");
        }
        else{
            System.out.println("Not a palindrome!");
        }
    }
}
```

Output

```
54
N:54
M:45
Not a palindrome!

=== Code Execution Successful ===
```

Q4 Print following pattern

*

**

***

****

*****

Main.java

```java
import java.util.Scanner;

public class Main
{
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int n = input.nextInt();

        //System.out.println("Hello World"+n);
        for(int i=0;i<n;i++){
            for(int j=0;j<=i;j++){
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

Output

```
5
*
**
***
****
*****

=== Code Execution Successful ===
```

Q5 Print this pattern

1

121

12321

1234321

123454321

Main.java

```java
import java.util.Scanner;

class Main{
    public static void main(String[] args){
        Scanner in = new Scanner(System.in);

        int n= 5;//in.nextInt();

        for(int i=0;i<2*n;i+=2){
            int a = 0;

            //System.out.println("i"+i);

            for(int j=1;j<=i+1;j++){
                if(j>(i+1)/2){
                    System.out.print(j-a);
                    a=a+2;
                }
                else{
                    System.out.print(j);
                }
            }
            System.out.println("");
        }
    }
}
```

Output

```
1
121
12321
1234321
123454321

=== Code Execution Successful ===
```

Q6 Find minimum and maximum in an array

Main.java

```java
import java.util.Scanner;
import java.util.Arrays;
class Main{
    public static void main(String[] args){
        Scanner in = new Scanner(System.in);

        int n= in.nextInt();
        int arr[] = new int[n];

        for(int i=0;i<n;i++){
            arr[i]=in.nextInt();
        }

        System.out.println(Arrays.toString(arr));

        int max = Integer.MIN_VALUE;
        int min = Integer.MAX_VALUE;

        for(int i=0;i<n;i++){
            if(arr[i]>max){
                max=arr[i];
            }
            if(arr[i]<min){
                min=arr[i];
            }
        }

        System.out.println("MIN: "+min+"\nMAX: "+max);

    }
}
```

Output

```
5
3
5
7
1
2
[3, 5, 7, 1, 2]
MIN: 1
MAX: 7

=== Code Execution Successful ===
```