Ques to practice after studying the topics

- Find min/max of 3 numbers
- Form different types of patterns -diamond, triangle, empty square
- Patterns ques (you can do any number of questions from these which you like)-

- Given N, print patterns upto N lines. For eg For N=6 , the following pattern will be printed.
1
11
111
1001
11111
100001

- Take N (number of rows), print the following pattern (for N = 4).
```
      1       1
      1 2     2 1
      1 2 3   3 2 1
      1 2 3 4 3 2 1
```

- Take N (number of rows), print the following pattern (for N = 4).
```
       1
      2 3 2
     3 4 5 4 3
    4 5 6 7 6 5 4
```

- Take N as input. For a value of N=7, we wish to draw the following pattern :
```
        1
      2 1   1 2
     3 2 1   1 2 3
    4 3 2 1     1 2 3 4
     3 2 1   1 2 3
      2 1   1 2
        1
```

- Take N (number of rows), print the following pattern (for N = 5)
1
2 2
3 0 3
4 0 0 4
5 0 0 0 5

- Take N as input. For a value of N=5, we wish to draw the following pattern :

```
5               5
5 4            4 5
5 4 3         3 4 5
5 4 3 2     2 3 4 5
5 4 3 2 1  1 2 3 4 5
5 4 3 2 1 0 1 2 3 4 5
5 4 3 2 1  1 2 3 4 5
5 4 3 2     2 3 4 5
5 4 3         3 4 5
5 4            4 5
5               5
```

- Take as input N, an odd number(>=5) Print the following pattern for N = 7
```
*   ****
*   *
*   *
*******
    *   *
     *   *
****   *
```

- Take N (number of rows), print the following pattern (for N = 5).
```
* * * * *
* *   * *
*       *
* *   * *
* * * * *
```

- Take n as number of rows, print the following pattern (for n=5)
```
1 2 3 4 5
1 2 3 4 *
1 2 3 * * *
1 2 * * * * *
1 * * * * * * *
```

- Print pascal triangle till n rows. For n=5 given below
```
    1
   11
  121
 1331
14641
```

- Ques on finding time complexity

- Checking prime number in sqrt(n)
- Implement sieve of eratosthenes https://leetcode.com/problems/count-primes/
- Find smallest prime factor
- Check if a number if a power of 2 or not in O(1)
- Count total set bits
- Divide Integers without / operator
- Power Set (this is very important)
- Find MSB in o(1)
- Find the square of a number without using multiplication or division
- Convert Binary to decimal and vice versa
- Finding number of 1 in binary rep
- Count digits of number
- Reverse a number
- Factorial of a number
- Check whether a number is Palindrome
https://practice.geeksforgeeks.org/problems/palindrome0746/1
https://leetcode.com/problems/palindrome-number/
- Check whether a number is armstrong number
https://practice.geeksforgeeks.org/problems/armstrong-numbers2727/1
- Calculate Npr and ncr
- Write code for Fast exponentiation https://leetcode.com/problems/powx-n/

Extra questions -
https://leetcode.com/problems/factorial-trailing-zeroes/
https://leetcode.com/problems/valid-palindrome/
https://practice.geeksforgeeks.org/problems/power-of-numbers-1587115620/1
https://leetcode.com/problems/super-pow/
https://leetcode.com/problems/number-of-digit-one/
https://leetcode.com/problems/count-numbers-with-unique-digits/
https://leetcode.com/problems/clumsy-factorial/
https://leetcode.com/problems/unique-binary-search-trees/