1. **WAP to take your phone number as input and (i). Display it as integer, (ii). Reverse its alternate positions.**

Sample Input: 9876543210

Sample output: 9876543210

8967452301

1. **WAP to find the positive difference between the sum of odd and even digits of your phone number.**

Sample Input: 9821076354

Sample Output: 5

Explanation : 9+7+5+3+1=25 8+6+4+2=20 diff=5

1. **WAP to take a number as input and check whether the number is**
   1. **Palindrome**
   2. **Prime number**
   3. **Armstrong number**
   4. **Perfect number**
   5. **Strong number**

**Using functions for each type returning (1/0) based on success value.**

1. **WAP to find whether a given number is palindrome capable or not.**

Sample input: 2125445

Sample Output: Yes

Sample input: 212544

Sample Output: No

The 1st number can be a palindrome as 2451542 but the 2nd can never be a palindrome.

1. **WAP to input two numbers and find**
   1. **LCM**
   2. **HCF**
   3. **Common Factors between them**
   4. **Composite numbers between them**
2. **WAP to input n and**
   1. **Find Fibonacci series up to n**
   2. **Print n lines of Pascal’s triangle**
3. **Pattern Programs (do it for a dynamic input n)**
4. **Write a program to convert**

**1. A given decimal to binary**

**2. A given binary to decimal**

1. **Write a program to implement searching techniques using functions.**
   1. **Linear Search**
   2. **Binary Search**
   3. **1/3 Search => dividing the array like binary search but in parts of 1/3 of array**
   4. **\*\*\* try all these as recursive functions also**
2. **WAP to implement simple sorting algorithms.**
   1. **Bubble sort**
   2. **Selection sort**
   3. **Insertion sort**
3. **WAP to count the duplicate elements in the array and display them.**

Input : 1 2 3 1 1 2 4 5

Output: 1: 3 duplicates

2: 2duplicates

1. **WAP for sorting an array with respect to the frequency of the integers.**

(frequency sorting refers to the maximum times occurring elements at first and similarly cont.)