

## Recursion - Take Home Problems

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Do the given problems using JavaScript.

1. Write a Program to input a string and check if it's palindrome in nature or not using recursion.

**Example: ParttraP is a palindrome word while Apple is not a palindrome word.**

2. Write a Program to convert Decimal Number (BASE 10) TO Binary Number (BASE 2).

**Example: Input :  $(2)_{10}$**

**Output:  $(010)_2$**

3. Write a Program to print all permutations of an array.
4. Write a Program to return the count of the occurrences of d as a digit for n number using recursion.

**Example:- Input: n = 86487 d = 8**

**Output: 2**

5. Write a Program to print a Pascal's Triangle.

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      1
    1 1
  1 2 1
1 3 3 1
1 4 6 4 1
1 5 10 10 5 1
  
```