## Recursion -3 Assignment Questions





## **Assignment Questions**



1) Given a positive integer n, return true if it is a power of 2.

(Easy)

Sample Input: 17 Sample Output: false Sample Input:32 Sample Output: true

2) Find the first uppercase letter in the given string and return its index. You need to do this recursively. (Easy) Return -1 in case there is no uppercase character.

Sample Input: physicSwAllaH

Sample Output: 6

3) Given a string, check if it is a palindrome or not. You need to write a recursive function which checks this.

(Medium)

Sample Input: skills Sample Output: false Sample Input: abcdcba Sample Output: true

4) Given an integer, write a recursive function which prints the number in reverse order. Note: the integer number n is 0<n<10000. Avoid preceding zeroes.

(Medium)

Sample Input: 12345 Sample Output: 54321 Sample Input: 368900 Sample Output: 9863

5) Given an array of integers, print a sum triangle using recursion from it such that the first level has all array elements. After that, at each level the number of elements is one less than the previous level and elements at the level will be the Sum of consecutive two elements in the previous level.

(Hard)

Sample Input: [5,4,3,2,1] Sample Output: 5, 4, 3, 2, 1 9, 7, 5, 3 16, 12, 8 28, 20 48