



Coding Challenge #33 (Question)

Swap the character

Given three strings as an input. Change the vowels of the first string to \$. Change the consonants of the second string to #. Convert the entire third string from lowercase to uppercase. Finally, concatenate all these three strings and print the output.

Sample Input 0:

Raghu
Vishnu
Farhana

Sample Output 0:

R\$gh\$#i###uFARHANA

Sample Input 1:

Rajendar
PRADYUMNA
PlacementsKey

Sample Output 1:

R\$j\$nd\$r##A##U##APLACEMENTSKEY



Coding Challenge #33 (C Solution)

```
#include<stdio.h>

#include<stdlib.h>

char isVowel(char c,int n)
{
    if((c=='A' || c=='E' || c=='I' || c=='O' || c=='U' || c=='a' || c=='e' || c=='i' || c=='o' || c==
    'u')&& n==1)
    {
        return '$';
    }
    else
    if((c!='A'&&c!='E'&&c!='I'&&c!='O'&&c!='U'&&c!='a'&&c!='e'&&c!='i'&&c!='o'&&c!='
    u')&& n==2)
    {
        return '#';
    }
    else if((c>='a'&&c<='z')&& n==3)
    {
        return c-32;
    }
    return c;
}
```



Coding Challenge #33 (C Solution contd.)

```
int main()
{
    int i,j;
    char string[3][100];
    for(i=0;i<3;i++)
    {
        scanf("%s",string[i]);
    }
    for(i=0;i<3;i++)
    {
        for(j=0;string[i][j]!='\0';j++)
        {
            printf("%c",isVowel(string[i][j],i+1));
        }
    }
}
```



Coding Challenge #33 (JAVA Solution)

```
import java.util.*;

import java.lang.*;

import java.util.regex.Matcher; I
mport java.util.regex.Pattern;

class Main {

    public static void main (String[] args) { int i,j;

    String str1,str2,str3;

    Scanner sc=new Scanner(System.in);

    str1=sc.nextLine();

    str2=sc.nextLine();

    str3=sc.nextLine();

    String regex = "([^aeiouAEIOU0-9\\W]+)";

    String result = str2.replaceAll(regex, #");

    System.out.print(str1.replaceAll("[AaEeliOoUu]", Matcher.quoteReplacement("$")));

    System.out.print(result);

    System.out.print(str3.toUpperCase());

    }

}
```



Coding Challenge #34 (Question)

Perfect number

Check whether a number is perfect number or not.

A perfect number is a positive integer that is equal to the sum of its proper positive divisors.

Example:

*Let us consider the number 6. The factors of 6 are 1, 2, 3 and 6.
Sum of factors of 6 = $1 + 2 + 3 = 6$.*

Therefore, 6 is a perfect number as sum of its factors = 6, the number itself.

Sample Input 0:

6

Sample Output 0:

Yes

Sample Input 1:

7

Sample Output 1:

No



Coding Challenge #34 (C Solution)

```
#include<stdio.h>

int main()
{
    int n,i,sum=0;
    scanf("%d", &n);
    for(i = 1; i < n; i++)
    {
        if(n % i == 0)
            sum=sum+i;
    }
    if(sum == n)
        printf("Yes");
    else
        printf("No");

    return 0;
}
```



Coding Challenge #34 (JAVA Solution)

```
import java.util.*;

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

        int num = sc.nextInt();

        int i, sum = 0;
        for(i=1; i<num; i++)
        {
            if(num%i == 0)
            {
                sum += i;
            }
        }
        if(sum == num)
        {
            System.out.print("Yes");
        }
        else { System.out.print("No");
        }
    }
}
```