PLACEMENTS KEY'S

Coding Challenge #37 (Question)

Day - 19

Strong number

Write a program to find whether a given number is a strong number or not. Strong number is a special number whose sum of factorial of digits is equal to the original number.

For example: 145 is strong number since 1! + 4! + 5! = 145

Sample Input 0:

145

Sample Output 0:

Yes

Sample Input 1:

4

Sample Output 1:

No

PLACEMENTS KEY'S

Coding Challenge #37 (C Solution)

Day - 19

```
#include<stdio.h>
int fact(int n)
{
        int i,fact=1;
        for(i=1;i<=n;i++)
   {
        fact=fact*i;
   }
        return fact;
}
int main()
{
        int num,sum=0,rem,copy;
        scanf("%d",&num);
        copy=num;
         while(num!=0)
   {
        rem = num%10;
        sum=sum+fact(rem);
        num=num/10;
   }
```

PLACEMENTS KEY'S

Coding Challenge #37 (C Solution contd.)

Day - 19

```
if(copy==sum)
   {
         printf("Yes");
   }
         else
   {
     printf("No");
   }
}
```

PLACEMENTS KEY'S

Coding Challenge #37 (JAVA Solution)

Day - 19

```
import java.util.*;

public class Main

 {

public static void main(String[] args)

{

int n,i; int fact,rem;

Scanner sc = new Scanner(System.in);

 n = sc.nextInt();

 int sum = 0;

 int temp = n;

while(n != 0)

{

i = 1;

 fact = 1;

rem = n % 10;

 while(i <= rem)

 {

 fact = fact * i; i++;

 }
```

PLACEMENTS KEY'S

Coding Challenge #37 (JAVA Solution contd.)

Day - 19

```
sum = sum + fact; n = n / 10;

}

if(sum == temp)

System.out.println("Yes");

 else System.out.println("No");

}

}
```

PLACEMENTS KEY'S

Coding Challenge #38 (Question)

Day - 19

Decimal to Binary

Write a program to convert a given decimal integer number n to its binary equivalent.

Sample Input 0:

3

Sample Output 0:

11

Sample Input 1:

100

Sample Output 1:

1100100

PLACEMENTS KEY'S

Coding Challenge #38 (C Solution)

Day - 19

```
#include<stdio.h>

#include<stdlib.h>

int main(int a, char* argv[])

{

        int n, cnt,i;

        int b[32];

        scanf("%d",&n);

        cnt=0;

        while(n!=0)

        {

                b[cnt]=n%2;

                n=n/2;

                cnt++;

        }

        for(i=(cnt-1);i>=0;i--)

        printf("%d",b[i]);

        return 0;

}
```

PLACEMENTS KEY'S

Coding Challenge #38 (JAVA Solution)

Day - 19

```
import java.util.Scanner;
class Main
{
 public static long decimal_to_binary(int n)
 {
        long binary = 0;
        int remainder, i, flag = 1;
         for(i = 1; n != 0; i = i * 10)
         {
        remainder = n % 2;
         n /= 2;
        binary += remainder * i;
        }
        return binary;
}
public static void main(String args[])
{
         Scanner sc = new Scanner(System.in);
          int n = sc.nextInt();
         System.out.println(decimal_to_binary(n));
}
}
```