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A strong number is a number whose Sum of the factorial of its digits equals the number.

Ex. 145

$$1! = 1 \quad 4! = 24 \quad 5! = 120$$

$$\text{Sum} = 1 + 24 + 120 = 145 \rightarrow \text{strong number.}$$

```
#include <stdio.h>
```

```
int main( )
```

```
{
```

```
    int num, temp, digit;
```

```
    long long fact, Sum = 0;
```

```
    printf("Enter a number:");
```

```
    scanf("%d", &num);
```

```
    temp = num;
```

```
    while (temp > 0) {
```

```
        digit = temp % 10;
```

```
        fact = 1;
```

```
        for (int i = 1; i <= digit; i++) {
```

```
            fact *= i;
```

```
        }
```

```
        Sum += fact;
```

```
        temp /= 10;
```

```
    }
```

```
    if (Sum == num)
```

```
        printf("%d is a Strong number.\n", num);
```

```
    else
```



```

printf("%d is NOT a Strong Number.\n", num);
return 0;
}

```

Enter a number: 145

145 is a Strong Number.

2) Perfect Number:- A perfect Number is a number that is equal to the sum of its proper divisors

28 \rightarrow Divisors: 1, 2, 4, 7, 14 \rightarrow Sum = 28.

```

#include <stdio.h>

```

```

int main()

```

```

{

```

```

    int num, Sum = 0;

```

```

    printf("Enter a number:");

```

```

    scanf("%d", &num);

```

```

    for (int i = 1; i <= num / 2; i++)

```

```

    {
        if (num % i == 0)

```

```

        {

```

```

            Sum += i;

```

```

        }

```

```

    }

```

```

        if (Sum == num)

```

```

            printf("%d is a Perfect Number.\n", num);

```

```

        else

```

```

            printf("%d is NOT a perfect Number.\n", num);

```



```
return 0;
```

```
}
```

Output:

Enter a Number: 28

28 is a perfect Number.

28 ← P.F. P.D. 21021