

28/11/20
1) Strong number

for example, 145 is a strong number because:

$$1! + 4! + 5! = 1 + 24 + 120 = 145$$

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

```
int main() {
```

```
int num, temp, rem;
```

```
int sum=0, fact, i;
```

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

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

```
temp = num;
```

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

```
    rem = temp % 10;
```

```
    while
```

```
        fact = fact * i;
```

```
    }
```

```
    sum = sum + fact;
```

```
    temp = 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;
```

```
}
```

Q) Perfect number.

that is equal to sum of its proper positive (division excluding the number itself) for ex 6, is a perfect number because its proper divisions are 1, 2, 3, and their sum (1+2+3) is equal to 6.

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

```
int main() {
```

```
int num, i, sum=0;
```

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

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

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

```
if (num%i==0) {
```

```
sum = 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:-

145 → strong number

6 → Perfect number.