

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;
```

variable

```
fact = fact * p;
```

```
}
```

```
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;
```

```
}
```

## ② Perfect number.

that is equal to sum of its proper positive divisors excluding the number itself for ex 6 is a perfect number because its proper divisors 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("\n%d is a perfect number\n", num);
```

```
    else
```

```
        printf("\n%d is NOT a perfect number\n", num);
```

```
    return 0;
```

```
}.  
Output:
```

145 → strong number

6 → Perfect number.