

2) perfect number

That is equal to sum of its proper positive division (division excluding the number itself). For example 6 is a perfect number because its proper divisors are 1, 2 and 3 and their sum ($1+2+3$) is equal to 6.

#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);
```

```
}
```

out put:

Enter a number : 28

28 is a perfect number

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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;
```

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

```
scanf("i.d", &num);
```

```
temp=num;
```

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

```
{
```

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

```
int fact=1;
```

```
for (int i=1; i<=rem; i++)
```

```
{
```

```
fact*=i;
```

```
}
```

```
sum+=fact;
```

```
temp/=10;
```

```
if (sum==num)
```

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

```
else
```

```
printf("%i.d is not a strong number\n", num);
```

```
return 0;
```

```
}
```