

4. perfect square.

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

```
void main()
```

```
{
```

```
    int num, sq;
```

```
    clrscr();
```

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

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

```
    sq = sqrt(num);
```

```
    if (sq * sq == num)
```

```
        printf("%.d is a Perfect Square", num);
```

```
    else
```

```
        printf("%.d is not a Perfect Square", num);
```

```
    getch();
```

```
}
```

Out put:

Enter a number 16

16 is a Perfect square.

### 3. Perfect number.

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

```
#include <conio.h>
```

```
void main()
```

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

```
    clrscr();
```

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

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

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

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

```
            sum = sum + i;
```

```
        }
```

```
    }
```

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

```
        printf("%d is a Perfect Number", num);
```

```
    else
```

```
        printf("%d is not a Perfect number", num);
```

```
    getch();
```

```
}
```

out put:

Enter a number: 6

6 is a Perfect number

## 2. Strong number:

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

```
#include <conio.h>
```

```
int sum = 0;
```

```
void main()
```

```
{
```

```
int num, temp, digit, fact, i;
```

```
clrscr();
```

```
int sum = 0;
```

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

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

```
temp = num;
```

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

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

```
fact = 1;
```

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

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

```
}
```

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

```
temp = temp / 10;
```

```
}
```

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

```
printf("%d is a Strong Number", num);
```

```
else
```

```
printf("%d is not a Strong Number", num);
```

```
getch();
```

```
}
```

output:

Enter a number : 145

145 is a strong number

# 1. Finding prime factors of a number

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

```
#include <conio.h>
```

```
void main () {
```

```
    int num, i;
```

```
    clrscr();
```

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

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

```
    printf ("prime factors of %d are:", num);
```

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

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

```
            printf ("%d", i);
```

```
            num = num / i;
```

```
        }
```

```
    }
```

```
    getch();
```

```
}
```

out put:

Enter a number: 36

Prime factors of 36 are: 2 2 3 3