

(1) Program on Strong Numbers in C language.

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

```
int main( )
```

```
{
```

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

```
    long fact;
```

```
    printf("Enter any number to check for a  
    strong Number:");
```

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

```
    temp = num;
```

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

```
        remainder = temp % 10;
```

```
        fact = 1;
```

```
        for (i = 1; i <= remainder; 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;
```

```
}
```

Output:-

Enter a number to check for a strong
Number: 145

strong Number.

Program on perfect numbers

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

```
int is perfect(int num);
```

```
int main( )
```

```
{
```

```
    int num;
```

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

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

```
    if (is perfect(num)) {
```

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

```
    else
```

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

```
    return 0;
```

```
}
```

```
int is perfect(int num) {
```

```
    int sum = 0;
```

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

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

```
    {
```

```
        sum += i;
```

```
    }
```

```
    return sum == num;
```

```
}
```

Output:-

Enter a number: 28

28 is a perfect number.