

# 【C】 Day7

▼ Course	Advanced C
📅 Study Date	@April 13, 2022

## 【Ch7】 Input and Output

### 7.8 Miscellaneous Functions

#### 7.8.1 String Operations

We have already learned the string functions `strlen`, `strcpy`, `strcat`, and `strcmp`, found in `<string.h>`.

In the following, `s` and `t` are `char*`, and `c` and `n` are ints.

```
strcat(s, t) // Concatenate t to end of s
strncat(s, t, n) // Concatenate n characters of t to end of s
strcmp(s, t) // Return negative, zero, or positive for s < t, s == t, or s > t
strncmp(s, t, n) // Same as strcmp but only in first n characters
strcpy(s, t) // Copy t to s
strncpy(s, t, n) // Copy at most n characters of t to s
strlen(s) // Return length of s
strchr(s, c) // Return pointer to first c in s, or NULL if not present
strrchr(s, c) // Return pointer to last c in s, or NULL if not present
```

#### 7.8.2 Character Class Testing and Conversion

Several functions from `<ctype.h>` perform character tests and conversions.

The following functions return int.

```
isalpha(c) // Non-zero if c is alphabetic, 0 if not
isupper(c) // Non-zero if c is upper case, 0 if not
islower(c) // Non-zero if c is lower case, 0 if not
isdigit(c) // Non-zero if c is digit, 0 if not
isalnum(c) // Non-zero if isalpha(c) or isdigit(c), 0 if not
isspace(c) // Non-zero if c is blank, tab, newline, return, formfeed, vertical tab
toupper(c) // Return c converted to upper case
tolower(c) // Return c converted to lower case
```

### 7.8.3 Ungetc

```
int ungetc(int c, FILE *fp)
```

pushes the character `c` back onto file `fp`, and returns either `c`, or `EOF` for an error.

### 7.8.4 Command Execution

The function `system(char *s)` executes the command contained in the character string `s`, then resumes execution of the current program.

As a trivial example, on UNIX systems, the statement

```
system("date");
```

causes the program `date` to be run.