<assert.h>

|  |  |
| --- | --- |
| assert(expression) | Print error and terminate if expression is false |
| NDEBUG | If defined before assert.h then function will not work |

<ctype.h>

|  |  |
| --- | --- |
| isalpha() |  |
| isdigit() |  |
| isspace() | ‘ ‘, ‘\f’, ‘\n’, ‘\r’, ‘\t’, ‘\v’ |
| isalnum() |  |
| iscntrl() |  |
| isgraph() | true if its printable not include ‘ ‘ |
| islower() |  |
| isprint() | true if its printable also incluce ‘ ‘ |
| ispunct() | true for not space and alphanum |
| isupper() |  |
| isxdigit() |  |
| tolower() |  |
| toupper() |  |

<errno.h>

|  |  |
| --- | --- |
| errno | A variable that returns a error code. |

<limits.h>

|  |  |
| --- | --- |
| CHAR\_BIT | num of bit in a byte |
| SCHAR\_MIN |  |
| SCHAR\_MAX |  |
| UCHAR\_MAX |  |
| CHAR\_MIN |  |
| CHAR\_MAX |  |
| MB\_LEN\_MAX | max number of byte supported for multibyte char |
| SHRT\_MIN |  |
| SHRT\_MAX |  |
| USHRT\_MIN |  |
| USHRT\_MAX |  |
| same for int and long |  |

<locale.h>

study later.

<math.h>

|  |  |
| --- | --- |
| acos() |  |
| asin() |  |
| atan() |  |
| atan2(x,y) | return atan(y/x) |
| cos() |  |
| sin() |  |
| tan() |  |
| cosh() |  |
| sinh() |  |
| tanh() |  |
| exp(x) | e^x |
| frexp() | need to study |
| ldexp() |  |
| log() | e base log |
| log10() |  |
| modf() | devide int and frcation part |
| pow(x,y) | x^y |
| sqrt() |  |
| ceil() |  |
| fabs() |  |
| floor() |  |
| fmod(x,y) | floting point reminder, x%y |

<setjmp.h>

|  |  |
| --- | --- |
| jmp\_buf my\_env |  |
| setjmp() |  |
| longjmp() |  |

<signal.h>

|  |  |
| --- | --- |
| signal( ) |  |
| raise() |  |

<stdarg.h>

|  |  |
| --- | --- |
| va\_list args | list of arguments. |
| va\_start(a, f) |  |
| va\_arg() |  |
| va\_end() |  |

<stddef.h>

|  |  |
| --- | --- |
| ptrdiff\_t | result of subracting two pointers |
| size\_t | unsigned int |
| NULL | NULL |
| offsetof(&a, &b) | find the byte from &a to &b |
| wchar\_t | unicode support |

<stdio.h>

|  |  |
| --- | --- |
| remove() | remove a file |
| rename() | rename a file |
| tmpfile() | creates a temporary file |
| tmpnam() |  |
| fclose() |  |
| fflush() |  |
| fopen() |  |
| freopen() |  |
| smtbuf() |  |
| smtvbuf() |  |
| fprintf() |  |
| fscanf() |  |
| printf() |  |
| scanfwrite() |  |
| sprintf() |  |
| sscanf() |  |
| vfprintf() |  |
| vprintf() |  |
| vsprintf() |  |
| fgetc() |  |
| fgets() |  |
| fputc() |  |
| fputs() |  |
| getc() |  |
| getchar() |  |
| gets() |  |
| putc() |  |
| putchar() |  |
| puts() |  |
| ungetc() |  |
| fread() |  |
| fwrite() |  |
| fgetpos() |  |
| fseek() |  |
| fsetpos() |  |
| ftell() |  |
| rewind() |  |
| clearerr() |  |
| feof() |  |
| ferror() |  |
| perror() |  |

<stdlib.h>

|  |  |
| --- | --- |
| atof() |  |
| atoi() |  |
| atol() |  |
| strtod() |  |
| strtol() |  |
| strtoul() |  |
| rand() |  |
| srand() |  |
| calloc() |  |
| free() |  |
| malloc() |  |
| realloc() |  |
| abort() | program termination |
| atexit() |  |
| rxit() |  |
| getenv() |  |
| system() |  |
| bsearch() |  |
| qsort() |  |
| abs() |  |
| div() |  |
| labs() |  |
| ldiv() |  |
| mblen() |  |
| mbtowc() |  |
| rctomb() |  |
| mbstowcs() |  |
| wcstombs() |  |

<string.h>

|  |  |
| --- | --- |
| memcpy() |  |
| memmove() |  |
| strcpy() |  |
| strncpy() |  |
| strcat() |  |
| strncat() |  |
| memcmp() |  |
| strcmp() |  |
| strcoll() |  |
| strncmp() |  |
| strxfrm() |  |
| memchr() |  |
| strcapn() |  |
| strpbrk() |  |
| strrchr() |  |
| strspn() |  |
| strstr() |  |
| strtok() |  |
| memset() |  |
| strerror() |  |
| strlen() |  |

<time.h>

|  |  |
| --- | --- |
| clock() |  |
| difftime() |  |
| mktime() |  |
| time() |  |
| asctime() |  |
| ctime() |  |
| gmtime() |  |
| localtime() |  |
| strftime() |  |
|  |  |