## **All C Functions**

<u>#, ##</u>	manipulate strings			
<u>#define</u>	define variables			
<u>#error</u>	display an error message			
#if, #ifdef, #ifndef, #else, #elif, #endif	conditional operators			
#include	insert the contents of another file			
#line	set line and file information			
#pragma	implementation specific command			
<u>#undef</u>	used to undefine variables			
Predefined preprocessor variables	miscellaneous preprocessor variables			
<u>abort</u>	stops the program			
<u>abs</u>	absolute value			
acos	arc cosine			
asctime	a textual version of the time			
<u>asin</u>	arc sine			
<u>assert</u>	stops the program if an expression isn't true			
<u>atan</u>	arc tangent			
atan2	arc tangent, using signs to determine quadrants			
atexit	sets a function to be called when the program exits			
<u>atof</u>	converts a string to a double			
<u>atoi</u>	converts a string to an integer			
<u>atol</u>	converts a string to a long			
bsearch	perform a binary search			
calloc	allocates and clears a two-dimensional chunk of memory			

<u>ceil</u>	the smallest integer not less than a certain value			
clearerr	clears errors			
clock	returns the amount of time that the program has been running			
cos	cosine			
cosh	hyperbolic cosine			
<u>ctime</u>	returns a specifically formatted version of the time			
difftime	the difference between two times			
div	returns the quotient and remainder of a division			
exit	stop the program			
<u>exp</u>	returns "e" raised to a given power			
<u>fabs</u>	absolute value for floating-point numbers			
fclose	close a file			
<u>feof</u>	true if at the end-of-file			
<u>ferror</u>	checks for a file error			
fflush	writes the contents of the output buffer			
fgetc	get a character from a stream			
fgetpos	get the file position indicator			
fgets	get a string of characters from a stream			
floor	returns the largest integer not greater than a given value			
fmod	returns the remainder of a division			
<u>fopen</u>	open a file			
<u>fprintf</u>	print formatted output to a file			
<u>fputc</u>	write a character to a file			
<u>fputs</u>	write a string to a file			
fread	read from a file			

free	returns previously allocated memory to the operating system			
freopen	open an existing stream with a different name			
frexp	decomposes a number into scientific notation			
fscanf	read formatted input from a file			
fseek	move to a specific location in a file			
fsetpos	move to a specific location in a file			
<u>ftell</u>	returns the current file position indicator			
<u>fwrite</u>	write to a file			
getc	read a character from a file			
getchar	read a character from STDIN			
getenv	get enviornment information about a variable			
gets	read a string from STDIN			
gmtime	returns a pointer to the current Greenwich Mean Time			
<u>isalnum</u>	true if a character is alphanumeric			
<u>isalpha</u>	true if a character is alphabetic			
<u>isentrl</u>	true if a character is a control character			
isdigit	true if a character is a digit			
<u>isgraph</u>	true if a character is a graphical character			
<u>islower</u>	true if a character is lowercase			
isprint	true if a character is a printing character			
<u>ispunct</u>	true if a character is punctuation			
isspace	true if a character is a space character			
isupper	true if a character is an uppercase character			
isxdigit	true if a character is a hexidecimal character			
labs	absolute value for long integers			

<u>ldexp</u>	computes a number in scientific notation			
<u>ldiv</u>	returns the quotient and remainder of a division, in long integer form			
<u>localtime</u>	returns a pointer to the current time			
<u>log</u>	natural logarithm			
<u>log10</u>	natural logarithm, in base 10			
<u>longjmp</u>	start execution at a certain point in the program			
malloc	allocates memory			
<u>memchr</u>	searches an array for the first occurance of a character			
<u>memcmp</u>	compares two buffers			
<u>memcpy</u>	copies one buffer to another			
memmove	moves one buffer to another			
memset	fills a buffer with a character			
mktime	returns the calendar version of a given time			
<u>modf</u>	decomposes a number into integer and fractional parts			
<u>perror</u>	displays a string version of the current error to <b>STDERR</b>			
pow	returns a given number raised to another number			
<u>printf</u>	write formatted output to STDOUT			
<u>putc</u>	write a character to a stream			
putchar	write a character to STDOUT			
<u>puts</u>	write a string to STDOUT			
<u>qsort</u>	perform a quicksort			
raise	send a signal to the program			
<u>rand</u>	returns a pseudorandom number			
<u>realloc</u>	changes the size of previously allocated memory			

remove	erase a file		
<u>rename</u>	rename a file		
rewind	move the file position indicator to the beginning of a file		
<u>round</u>	rounds given number to the nearest integer		
<u>scanf</u>	read formatted input from STDIN		
<u>setbuf</u>	set the buffer for a specific stream		
<u>setjmp</u>	set execution to start at a certain point		
setlocale	sets the current locale		
<u>setvbuf</u>	set the buffer and size for a specific stream		
signal	register a function as a signal handler		
<u>sin</u>	sine		
<u>sinh</u>	hyperbolic sine		
<u>sprintf</u>	write formatted output to a buffer		
<u>sqrt</u>	square root		
<u>srand</u>	initialize the random number generator		
sscanf	read formatted input from a buffer		
streat	concatenates two strings		
strchr	finds the first occurance of a character in a string		
stremp	compares two strings		
strcoll	compares two strings in accordance to the current locale		
strcpy	copies one string to another		
strespn	searches one string for any characters in another		
strerror	returns a text version of a given error code		
strftime	returns individual elements of the date and time		
strlen	returns the length of a given string		

strncat	concatenates a certain amount of characters of two strings			
strnemp	compares a certain amount of characters of two strings			
strncpy	copies a certain amount of characters from one string to another			
<u>strpbrk</u>	finds the first location of any character in one string, in another string			
strrchr	finds the last occurance of a character in a string			
<u>strspn</u>	returns the length of a substring of characters of a string			
strstr	finds the first occurance of a substring of characters			
strtod	converts a string to a double			
strtok	finds the next token in a string			
<u>strtol</u>	converts a string to a long			
strtoul	converts a string to an unsigned long			
<u>strxfrm</u>	converts a substring so that it can be used by string comparison functions			
<u>system</u>	perform a system call			
<u>tan</u>	tangent			
<u>tanh</u>	hyperbolic tangent			
<u>time</u>	returns the current calendar time of the system			
<u>tmpfile</u>	return a pointer to a temporary file			
<u>tmpnam</u>	return a unique filename			
tolower	converts a character to lowercase			
<u>toupper</u>	converts a character to uppercase			
ungetc	puts a character back into a stream			
va arg	use variable length parameter lists			
vprintf, vfprintf, and vsprintf	write formatted output with variable argument lists			