

## C function prototypes:

```
int execl(const char *pathname, char *const argv[])
void exit(int status)
int fclose(FILE *stream)
char *fgets(char *s, int n, FILE *stream)
FILE *fopen(const char *file, const char *mode)
pid_t fork(void)
int fprintf(FILE *restrict stream, const char *restrict format, ...)
size_t fread(void *ptr, size_t size, size_t nmemb, FILE *stream)
void free(void *ptr)
int fscanf(FILE *restrict stream, const char *restrict format, ...)
int fseek(FILE *stream, long offset, int whence)
    //set whence to SEEK.SET to seek from beginning of file
size_t fwrite(const void *ptr, size_t size, size_t nmemb, FILE *stream)
void *malloc(size_t size)
void perror(const char *s)
int printf(const char *format, ...)
int scanf(const char *restrict format, ...)
size_t strlen(const char *s)
char *strcat(char *dest, const char *src)
char *strncat(char *dest, const char *src, size_t n)
char *strncpy(char *dest, const char *src, size_t n)
pid_t wait(int *wstatus);
pid_t waitpid(pid_t pid, int *wstatus, int options);
```

### Excerpt from strcpy/strncpy man page:

The strcpy() functions copy the string src to dst (including the terminating '\0' character). The strncpy() function copies at most n characters from src into dst. If src is less than n characters long, the remainder of dst is filled with '\0' characters. Otherwise, dst is not terminated.

### Excerpt from strcat man page:

The strcat() function appends the src string to the dest string, overwriting the terminating null byte ('\0') at the end of dest, and then adds a terminating null byte.

**Makefile variables:** \$@ target, \$^ all prerequisites, \$? all out of date prereqs, \$< first prereq

## Macros:

WIFEXITED(wstatus)

returns true if the child terminated normally, that is, by calling exit(3) or \_exit(2), or by returning from main().

WEXITSTATUS(wstatus)

returns the exit status of the child. This consists of the least significant 8 bits of the status argument that the child specified in a call to exit(3) or \_exit(2) or as the argument for a return statement in main(). This macro should be employed only if WIFEXITED returned true.