// **II.B. Recursive case: look in subdirectories of 'dirnameCPtr':**

static int listDir\_helper(char\* path) {

  char slash = '\\';  // or maybe slash = '/'

  DIR\* dirnameCPtr;

  struct dirent \*ent;

  char \*NulPosition = &path[strlen(path)];

  if ((dir = opendir(path)) != NULL) {

    while ((ent = readdir(dir)) != NULL) {

      printf("%s%c%s\n", path, slash, ent->d\_name);

      if (ent->d\_type == DT\_DIR) {

        if ((strcmp(ent->d\_name, ".") != 0) && (strcmp(ent->d\_name, "..") != 0)) {

          sprintf(NulPosition, "%c%s", slash, ent->d\_name);

          if (listDir\_helper(path)) {

            closedir(dir);

            return 1;

          }

          \*NulPosition = '\0';

        }

      }

    }

  }

  closedir(dir);

  return 0;

}

int listDir(const char\* path){

  struct dirent \*ent;

  char pathmax[MAXPATHLEN+1+sizeof(ent->d\_name)+1];

  if (strlen(path) > MAXPATHLEN) {

    return 1;

  }

  strcpy(pathmax, path);

  return listDir\_helper(pathmax);

}

int main() {

  listDir2("dirnameCPtr");

  return 0;

}