TD2 : PDS

impl librairie standard I/O

```
#define TAILLE_TAMPON 64

struct s_kfile {
    int num_elems;
    int fd;
    int pos_file;
    int magic;
    char tampon[TAILLE_TAMPON];
};

typedef struct s_kfile KFILE;

#define MAGIC 0xCAFECAFE
#define IS_KFILE(f) (f) != NULL && (f)->magic == MAGIC

int flush_buffer(KFILE *f) {
    if (!IS_KFILE(f)) return EOF;
    if
      ((write(f->fd, f->tampon, f->num_elems)) < 0))
        return EOF;
    f->num_elems = 0;
    return 1;
}

char kputc(char c, KFILE *file){
    if (!IS_KFILE(file))
        return EOF;
    if(file->numElems > TAILLE_TAMPON){
      if(!flush_buffer(file)
          return EOF;
      } else {
          file->tampon[file->num_elems++] = c;
          return c;
      }

KFILE * open_kfile(const char * path){
    KFILE * f = (KFILE*) malloc(sizeof(KFILE));
    if(f == NULL) return NULL;
    f->magic = MAGIC;
    f->pos = 0;
    f->fd = open(path, O_WRONLY|O_CREAT, 0644);
    if(f->fd == NULL) {
        free(f); return NULL;
    }
    return f;
}
```

```
int kclose(KFILE* f){
    if(!IS_KFILE(f)) return EOF;
    flush_buffer(f);
    close(f->fd);    f->magic = 0;
    return free(f);
}
```