Practice 2

Report: Practice 2

We have corrected some errors of practice 2. Although they were not critical errors and our programs worked completely fine, we decided to improve out code so as to learn from our errors as well as to improve the efficiency of our programs.

The first error we corrected was in elestack-int.c and elestack-node.c. It was the same error in both files, in function <code>Elestack *EleStack_copy(const EleStack *ele)</code>. Previously we had:

```
EleStack *EleStack_copy(const EleStack *ele) {
    EleStack *target = NULL;
    if (!ele) return NULL;
    target = EleStack_ini();

    i = (int *)malloc(sizeof(int));

    if (!target || !i) {
        fprintf(stderr, "%s\n", strerrror(errno));
        return NULL;
    }

    *i = *(ele->e);
    target->e = i;
    return target;
}
```

And now we have:

```
EleStack *EleStack_copy(const EleStack *ele) {
    EleStack *target = NULL;
    if (!ele) return NULL;
    target = EleStack_ini();

    EleStack_setInfo(target,(void *)ele->e);
    return target;
}
```

What we have done is to use a function we already had instead of repeating what we had actually implemented in said function.

The same applies to elestack-node.c: Previously we had:

```
EleStack *EleStack_copy(const EleStack *ele) {
    EleStack *target = NULL;

    if (!ele) return NULL;
    target = EleStack_ini();
    if (!target) return NULL;

    target->info = (Node *)node_copy((void *)ele->info);
    return target;
}
```

And now we have:

```
EleStack *EleStack_copy(const EleStack *ele) {
    EleStack *target = NULL;

    if (!ele) return NULL;
    target = EleStack_ini();
    if (!target) return NULL;

    EleStack_setInfo(target, (void *)ele->info);
    return target;
}
```

In stack_fp.c we had included int_copy, int_print and meanStack functions and they should be in p2_e3-int.c. Even though it is not an error we have changed it because it was not correct.

Finally, we had an error in elestack-int.c in function Status $EleStack_setInfo$ (EleStack *ele, void *p). We had ele->e = i instead of * (ele->e) = i but we have tried to change it and then the program does not work anymore. It reaches segmentation fault error, so we have decided to leave it as it was because it worked perfectly.