0. Happening Happening Happening

Consider the following code:

```c
f(n) {
    if (n == 0) {
        return 0;
    }

    int result = 0;
    for (int i = 0; i < n; i++) {
        for (int j = 0; j < i; j++) {
            result += j;
        }
    }
    return f(n/2) + result + f(n/2);
}
```

(a) Find a recurrence for the time complexity of $f(n)$.

(b) Find a Big-Oh bound for your recurrence.