

1) (5 pts) DSN (Recursive Coding)

Mathematically, given a function f , we recursively define $f^k(n)$ as follows: if $k = 1$, $f^1(n) = f(n)$. Otherwise, for $k > 1$, $f^k(n) = f(f^{k-1}(n))$. Assume that a function, f , which takes in a single integer and returns an integer already exists. Write a recursive function $fcomp$, which takes in both n and k ($k > 0$), and returns $f^k(n)$.

```
int f(int n);
```

```
int fcomp(int n, int k) {
```

```
}
```