

```

void foo(char *str, char increment) {
    static int x = 0;

    if (increment) {
        x++;
        printf("%s incrementing x: %d\n", str, x);
    }
    else {
        printf("%s reporting x: %d\n", str, x);
    }
}

int main() {
    foo("prefork", 1);
    foo("prefork", 1);
    foo("prefork", 0);

    int result = fork();
    char *owner = "parent";
    if (result == 0){
        owner = "child";
        printf("I am the child: %d\n", getpid());
        int i = 0;
        while (i < 1000) {
            foo(owner, rand()%2); // 1 in 2 chance increment
            i++;
        }
    } else {
        printf("I am the parent: %d\n", getpid());
        int i = 0;
        while (i < 1000) {
            foo(owner, rand()%100==0); // 1 in 100 chance
            increment
            i++;
        }
    }

    usleep(1000);
    foo(owner, 0);
    printf("%s done\n", owner);

    return 0; // terminate program
}

```