

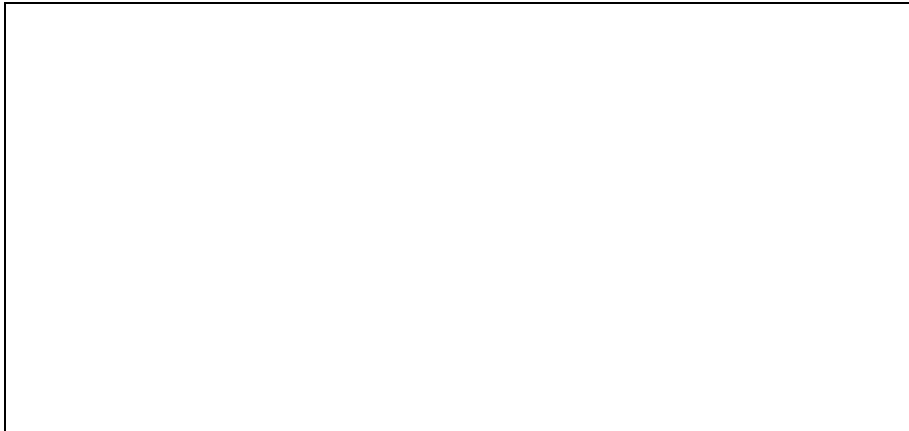
Name : _____

Give the output of the C program shown below:

```
#include <stdio.h>
#include <stdlib.h>

int f(int a[], int b, int c) {
    if (b == c) return a[b];
    return a[b] + f(a, b+1, c);
}

int main(void) {
    int vals[10] = {3,1,4,1,5,9,2,6,5,3};
    printf("%d\n", f(vals, 0, 3) );
    printf("%d\n", f(vals, 4, 8) );
    printf("%d\n", f(vals, 9, 9) );
    return 0;
}
```



Give the output of the C program shown below when run with the command `./a.out 100 59 777`

```
#include <stdio.h>
#include <stdlib.h>

int f(int a, int b) {
    if (a == 0) return 0;
    int val = a % 10;
    if (val == b)
        return 1 + f(a/10, val);
    return f(a/10, val);
}

int main(int argc, char *argv[]) {
    for (int a=1; a<argc; a++) {
        int num = atoi(argv[a]);
        printf("%d and %d\n", num, f(num, -1) );
    }
    return 0;
}
```

