

Name : _____

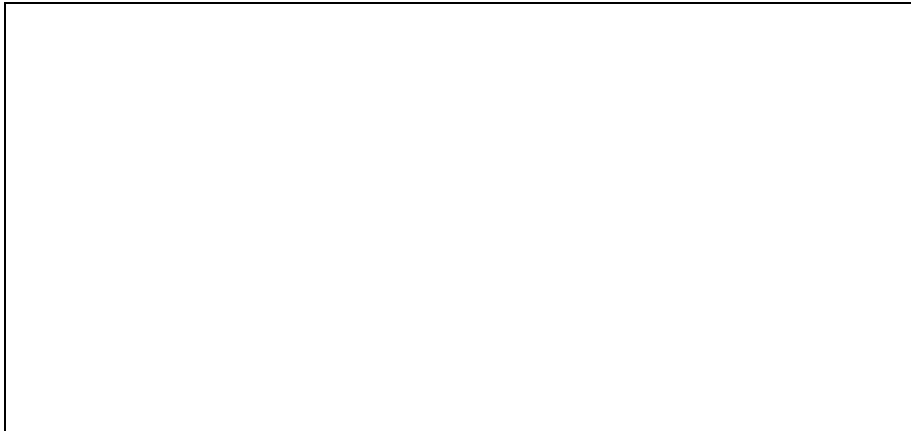
CS 100 Quiz #9

Give the output of the C program shown below:

```
#include <stdio.h>

typedef struct item {
    int value;
    struct item *next;
} Item;

int main(void) {
    Item a, b;
    a.value = 0; a.next = &b;
    b.value = 0; b.next = &a;
    Item *ptr = &a;
    for (int z=1; z<5; z++) {
        ptr->value = ptr->value + z;
        ptr = ptr->next;
    }
    printf("%d and %d\n", a.value, b.value);
    return 0;
}
```



Give the output of the C program shown below:

```
#include <stdio.h>

int main(void) {
    int data[2][4] = { {1,2,3,4}, {5,4,3,2} };
    int x = 0, y = 0;

    for (int a=0; a<2; a++) {
        for (int b=0; b<4; b++) {
            if ( (a+b)%2 == 0 )
                x = x + data[a][b];
            else
                y = y + data[a][b];
        }
    }
    printf("%d and %d\n", x, y);
    return 0;
}
```

