

## Group Problem Set #1

Determine the computational complexity of the following four loops:

1. 

```
for (cnt1 = 0, i = 1; i <= n; i++)
  for (j = 1; j <= n; j++)
    cnt1++;
```
2. 

```
for (cnt2 = 0, i = 1; i <= n; i++)
  for (j = 1; j <= i; j++)
    cnt2++;
```
3. 

```
for (cnt3 = 0, i = 1; i <= n; i*=2)
  for (j = 1; j <= n; j++)
    cnt3++;
```
4. 

```
for (cnt4 = 0, i = 1; i <= n; i*=2)
  for (j = 1; j <= i; j++)
    cnt4++;
```