

**CMSC 113: Computer Science I**  
**while Exercises**

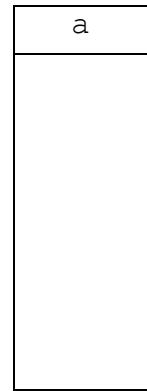
For each problem below, write what the program would print to the window. You may find it useful to use a table to track the values of the variables in the programs.

```
1. public class Counter
{
    public static void main(String[] args)
    {
        int count = 0;
        while(count < 5)
        {
            count = count + 1;
            System.out.println(count);
        }
    }
}
```

count

```
2. public class ThatsOdd
{
    public static void main(String[] args)
    {
        int a = 255;

        while(a > 0)
        {
            System.out.println(a);
            a = a / 2;
        }
    }
}
```



```
3. public class BackAndForth
{
    public static void main(String[] args)
    {
        int a = 0;
        int b = 8;

        while(b > 0)
        {
            if(a < 4)
            {
                a = a + b;
            }
            else
            {
                a = a - b;
            }
            b = b - 1;

            System.out.println(a);
        }
    }
}
```

a	b

x	y
---	---

```
4.    public class LoopLoop
{
    public static void main(String[] args)
    {
        int x = 0;
        int y = 0;

        while(y < 3)
        {
            x = 0;
            while(x < 3)
            {
                System.out.println(x + ", " + y);
                x = x + 1;
            }
            y = y + 1;
        }
    }
}
```