

## ARRAYS





$$x \in \mathbf{N}$$

$$\mathbf{N} = \{1, 2, 3, 4 \dots n\}$$

1 one



2 two



3 three



4 four



5 five



6 six



7 seven



8 eight



9 nine



10 ten



$$S = \{x \in \mathbf{N} \mid x > 1\}$$

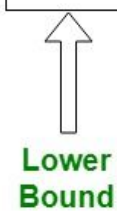
```
int[] m = {2, 3, 4, 5};
```





```
int[] m = new int[2];  
  
m[0] = 1;  
m[1] = 2;  
  
print(m[0] + " ", m[1]);
```

-----  
Console: 1 2



Array Length = 9

```
int[] m = new int[2];

m[0] = 1;
m[1] = 2;

boolean[] n = {true, false, false,
false};

if(m[0] < 3){
    print(m[0] + " ", n[0]);
} else {
    print(m[1] + " ", n[1]);
}
```

-----

Console: 1 true

```
int[] x = new int[100];

for(int i = 0; i < 100; i++){
    x[i] = i;
    print(x[i]);
}
```

```
-----
Console:0 1 2 3 4 5 6 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21 22
23 24 25 26 27 28 29 30 31 32 33
34 35 36 37 38 39 40 41 42 43 44
45 46 47 48 49 50 51 52 53 54 55
56 57 58 59 60 61 62 63 64 65 66
67 68 69 70 71 72 73 74 75 76 77
78 79 80 81 82 83 84 85 86 87 88
89 90 91 92 93 94 95 96 97 98 99
```

```
int[] x = new int[3];

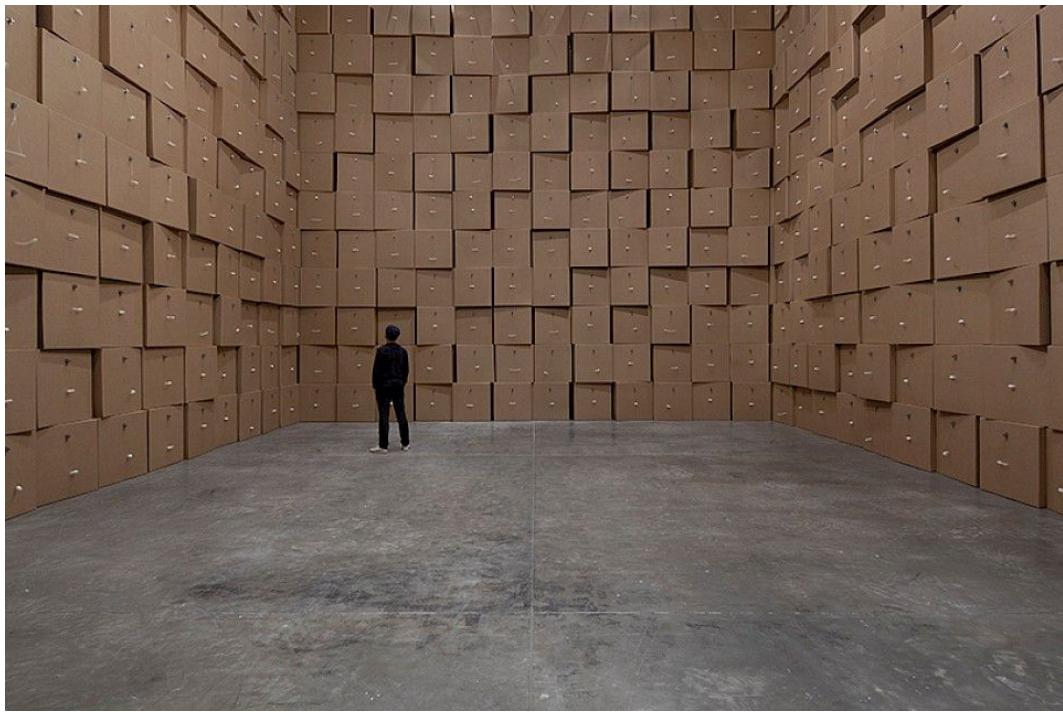
x[0] = 0;
x[1] = 1;
x[2] = 2;

for(int i = 0; i < 3; i++){

    if(x[i] % 2 == 0){
        print(x[i]);
        rect(height/2 + x[i], width/2, 5, 5);
    }
}
```

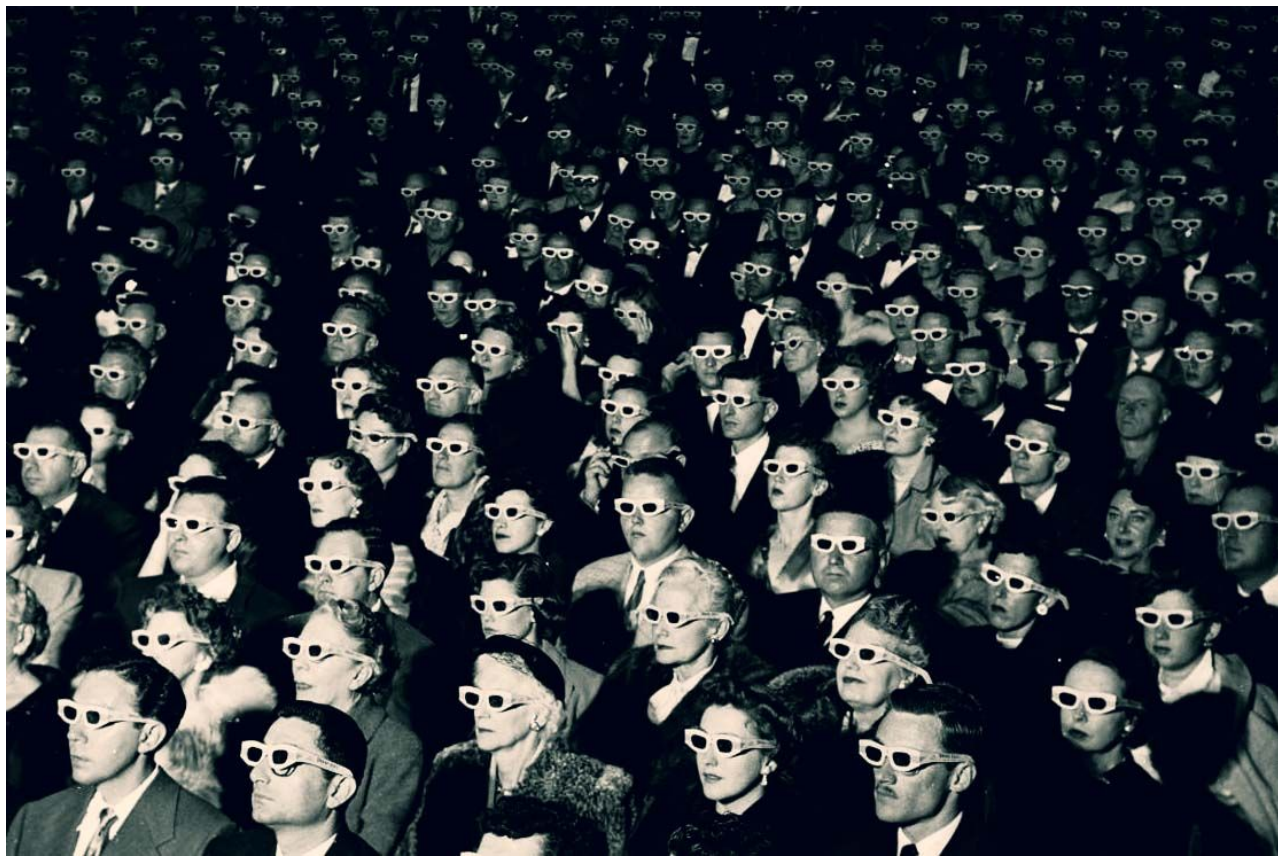
-----  
Console: 0 2













Homework: hand roll an array, create a simple program where the index variable of a for loop prints and displays some of the array values according to some condition [ie, there is a conditional selection of variables from the array for some output).