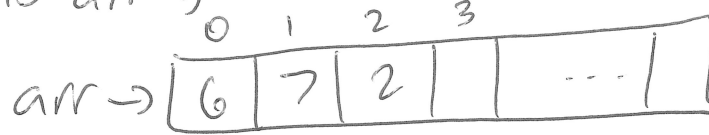
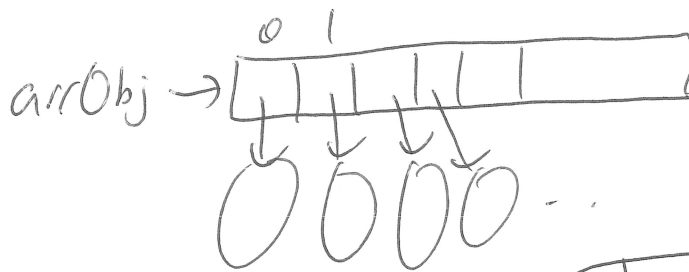


Java 6/19/19 ①

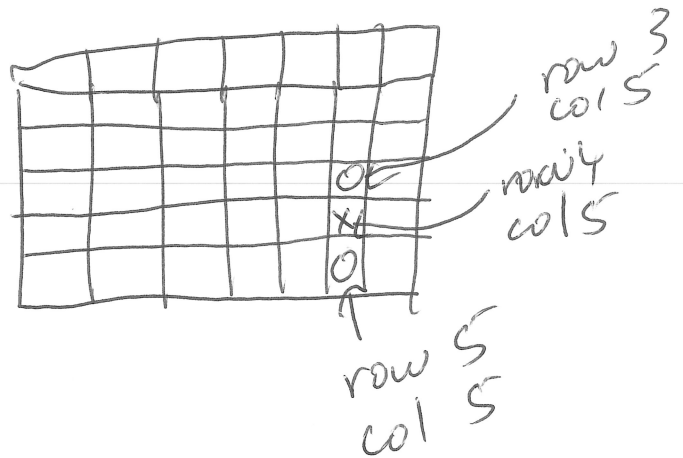
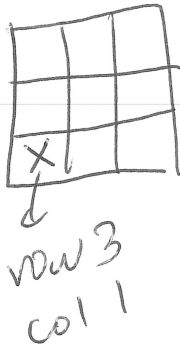
1D array



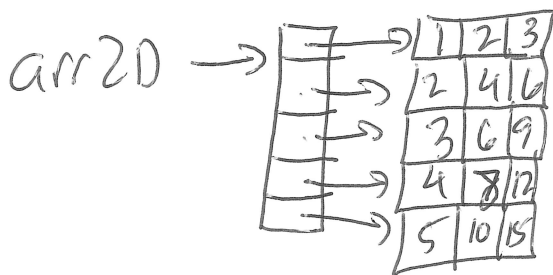
(primitives)



(objects)



In Java, we can do an array of arrays



int[][]

arr2D = new int[5][3];

arr2D[3][1] = 7;

```
for (int i = 0; i < arr2D.length; i++)  
    for (int j = 0; j < arr2D[i].length; j++)  
        arr2D[i][j] = (i+1) * (j+1);
```

(2)

gs
6

X	3	125	172	800				
X	6	60	30	80	100	270	235	
X	2	361	1020					
X	5	800	200	500	630	615		
X	1	265						
X	8	100	100	150	300	200	600	100
								700

```
Scanner fin = new Scanner(new File("score.txt"));
int numStudents = fin.nextInt();
```

```
int[][] gameScores = new int[numStudents][3];
```

```
Arrays.fill(gameScores, null);
```

```
for (int i=0; i<numStudents; i++)
```

```
for (int i=0; i<numStudents; i++) {
```

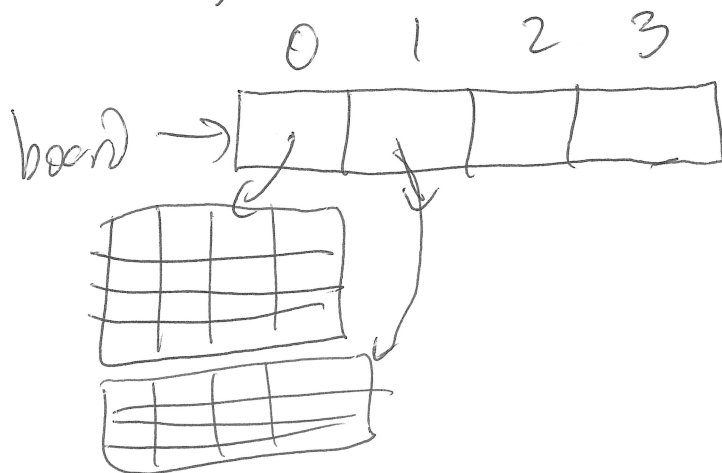
```
    int numGames = fin.nextInt();
```

```
    gameScores[i] = new int[numGames];
```

```
    for (int j=0; j<numGames; j++)
```

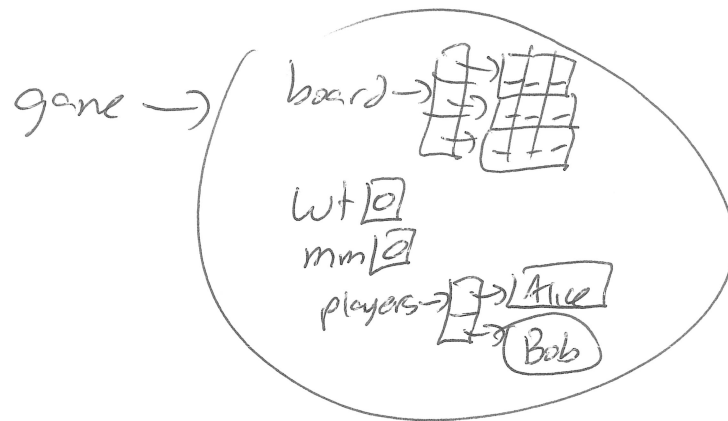
```
        gameScores[i][j] = fin.nextInt();
```

```
}
```



3

TicTacToe game = new TicTacToe("Alice", "Bob");



6 C

4 R

0	1	2	3	4	5
6	7	8	9	10	11
12	13	14	15	16	17
18	19	20	21	22	23



$16 / 6 \rightarrow 2$ Row

$16 \% 6 \rightarrow 4$ Col