Ejercicio de clase 2 Díaz Hernández Marcos Bryan

Ordena los siguientes valores utilizando el algoritmo y selection Sort (debe ser claro y descriptivo)

Claves = {17, 46, 8, 23, 33, 44, 12}

	1	2	3	4	5	6	7
	17	46	8	23	33	44	12
1)	8	46	17	23	33	44	12
2)	8	12	17	23	33	44	46
3)	8	12	17	23	33	44	46
4)	8	12	17	23	33	44	46
5)	8	12	17	23	33	44	46
6)	8	12	17	23	33	46	46

1) Nomenclatura
for = f
while = w
bot = l
swap = s

```
n=7
F(i=1 to 6)
min=1
F(j=2 to 7)
IF(l[j]<l[1])
    46<17 -> no
F(j=3 to 7)
IF(l[3]<l[1])
    8<17 -> si
    min=3
F(j=4 to 7)
IF(l[4]<l[3])
    23<8 -> no
F(j=5 to 7)
IF(l[5]<l[3])
    33<8 -> no
IF(j=6 to 7)
IF(l[6]<l[3])
    44<8 -> no
```

```
F(j=7 to 7)
IF(l[7]<l[3])
    12<8 -> no
s(ls[1], l[3])
```

2)
```
F(i=2 to 6)
min=2
F(j=3 to 7)
IF(l[3]<l[2])
    17<46 -> si
    min=3
F(j=4 to 7)
IF(l[4]<l[3])
    23<17 -> no
F(j=5 to 7)
IF(l[5]<l[3])
    33<17 -> no
F(j=6 to 7)
IF(l[6]<l[3])
    44<17 -> no
F(j=7 to 7)
IF(l[7]<l[3])
    12<17 -> si
    min=7
s(l[2], l[7])
```

3)
```
F(i=3 to 6)
min=3
F(j=4 to 7)
IF(l[4]<l[3])
    23<17 -> no
F(j=5 to 7)
IF(l[5]<l[3])
    33<17 -> no
F(j=6 to 7)
IF(l[6]<l[3])
    44<17 -> no
```

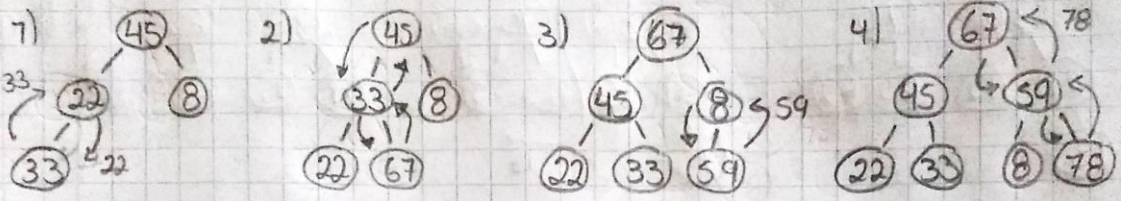
```
F(j=7 to 7)
IF(l[7]<l[3])
    46<17 -> no
s(l[3], l[3])
```

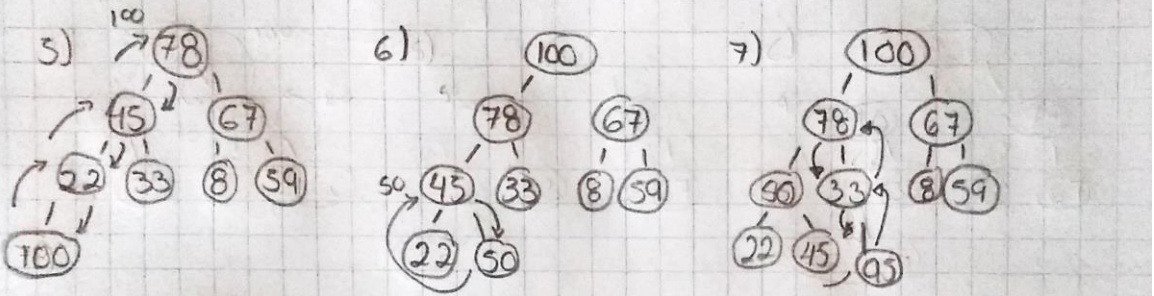
4)
```
F(i=4 to 6)
min=4
F(j=5 to 7)
IF(l[5]<l[4])
    33<23 -> no
F(j=6 to 7)
IF(l[6]<l[4])
    44<23 -> no
F(j=7 to 7)
IF(l[7]<l[4])
    46<23 -> no
s(l[4], l[4])
```

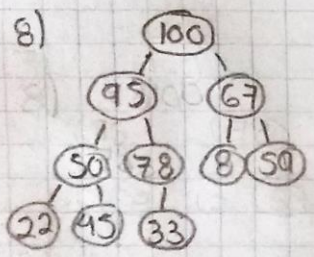
5)
```
F(i=5 to 6)
min=5
F(j=6 to 7)
IF(l[6]<l[5])
    44<33 -> no
F(j=7 to 7)
IF(l[7]<l[5])
    46<33 -> no
s(l[5]<l[5])
```

6)
```
F(i=6 to 6)
min 6
F(j=7 to 7)
IF(l[7]<l[6])
    46<44 -> no
s(l[6], l[6])
return bot
```

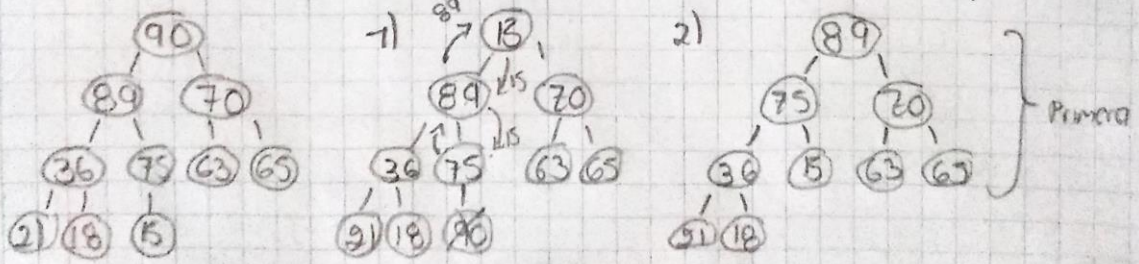
2- Construye un Heap con los datos: 45, 22, 8, 33, 67, 78, 100, 50, 95, 67, 59, 78
Dibujar cada inserción.

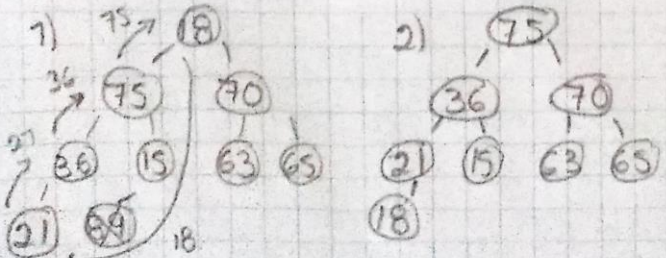


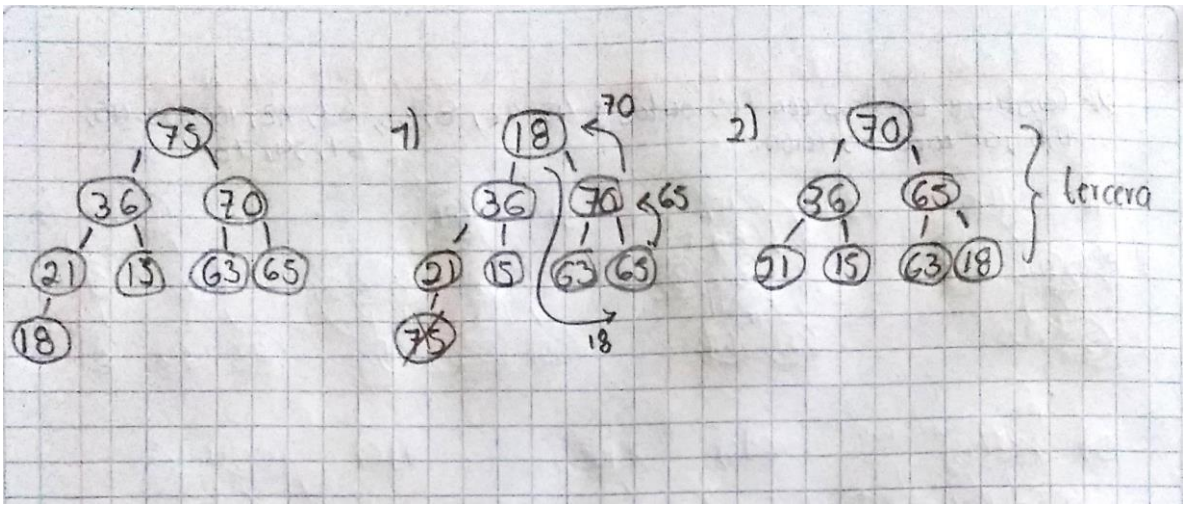




3. Dado el sig. heap. elimina 3 veces la raiz indicando los pasos.






75
36
70
21
15
63
65
18
1)
18
70
36
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65
21
15
63
65
75
18
2)
70
36
65
21
15
63
18
tercera