Ⅱ

```
def fun(n):
    if n < 2:
        return 3
    return fun(n-2) + 2* fun(n-4)
```

fun (5)

n	if cond	return statement
5	false	fun(3) + 2* fun(1)

return 6 → 2*3 = 6

fun(3) = 9

n	if cond	return statement
3	false	fun(1) + 2* fun(-1)

return 3   return 2*3 = 6

3 + 6 = 9

return 9 + 6 = 15

Ⅲ

$$arr = \begin{bmatrix} 0 & 1 & 2 & 3 & 4 \\ 3, & 1, & 4, & 2, & 5 \end{bmatrix}$$

$arr[arr[arr[3]]] = ??$

Sol^n:

$arr[arr[arr[3]]]$ → 2

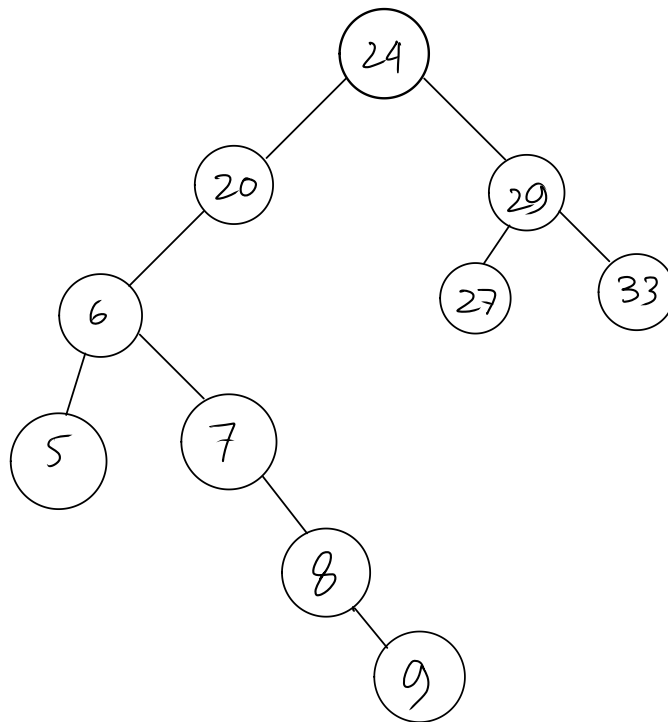$= arr[arr[2]]$ → 4

$= arr[4]$
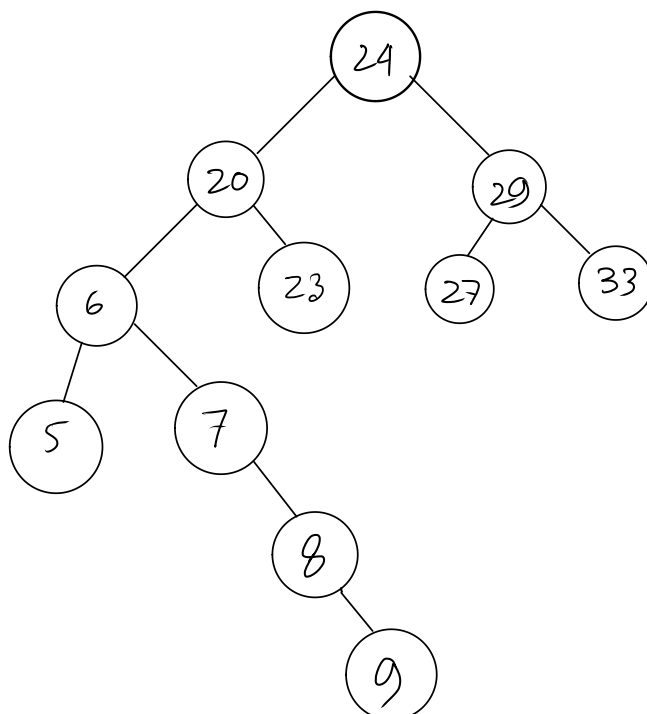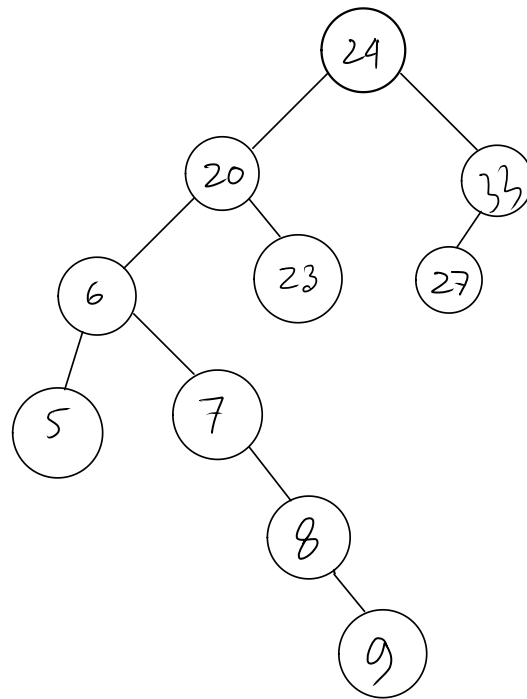
$= 5$

4 pointers need to be modified.
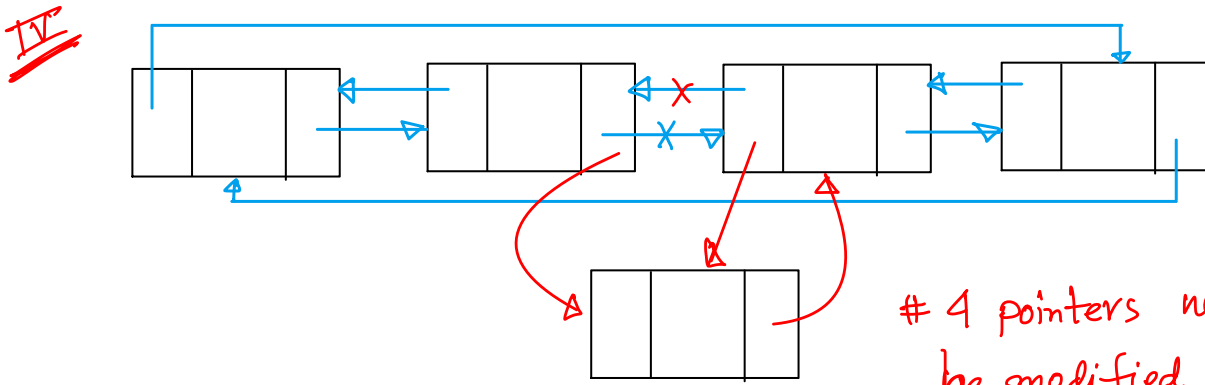
Given:

Inserting 23

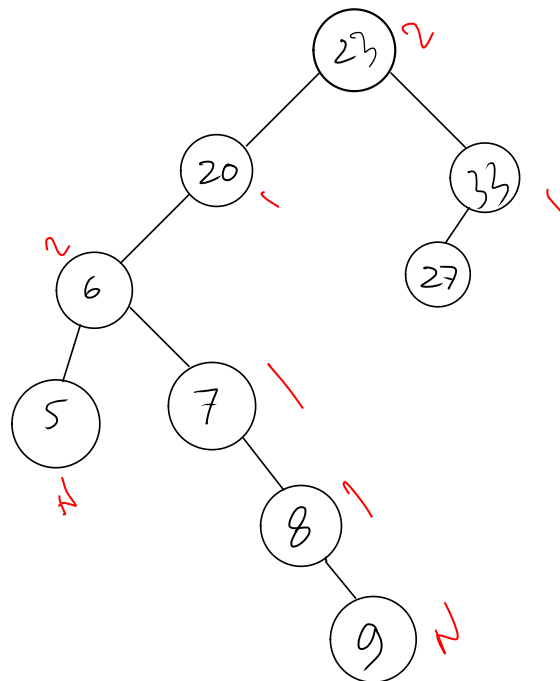# Removing 29 using successor

Root is deleted using predecessor

Ans:
ⓒ There are 5 nodes with only one child in the resulting tree.