- Sunday   9 —   11 pm

ARRAY ⇐

int (S1) = 80 ;   S2   60   Lowest
int (S2) = 60   S3   72
int (S3) = 72 ;   S1   80   Highest

many buckets   Last Idx = 12-1
                                = (11)

index   0   1   S1000 3   4   5   6   7   8   9   10 11
                    2
           ↓   ↓   ↓   ↓   ↓
         | 8̶2̶ | 60 | 72 | 64 | 32 | 47 | - | - |- |- |- |- |- |

                                              12
                                           elements
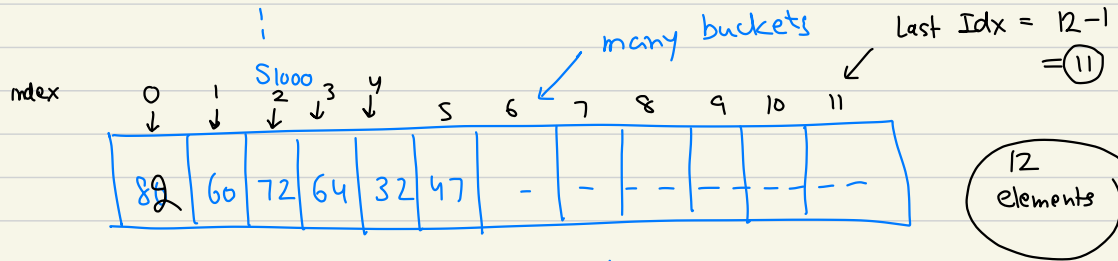
marks[0] = 82;
   ↑
  Acess

marks array
  ↗ single name

N elements
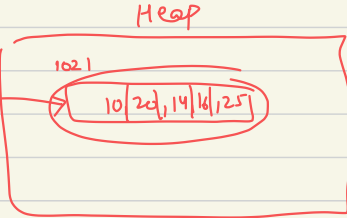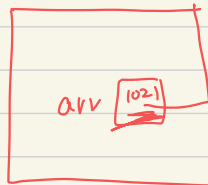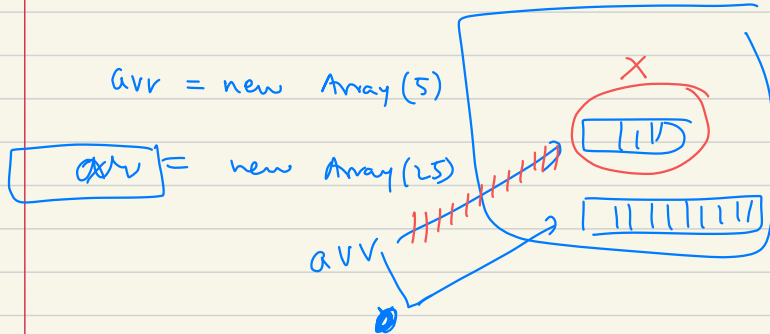0 ———— (N-1)
↑   ↑
first   last

How To create?

$\quad\quad$ └→ Many ways

① Init List $\quad$ *ony name* $\quad\quad\quad\quad$ Obj in the heap (ARRAY)

$\quad\quad$ int [ ] $\quad$ arr $\quad$ = $\quad$ { 10, 20, 14, 16, 25 },

$\quad\quad\quad\quad\quad\quad\quad$ ↑
$\quad\quad\quad\quad\quad\quad\quad$ obj
$\quad\quad\quad\quad\quad\quad\quad$ ref in
$\quad\quad\quad\quad\quad\quad\quad$ stack

$\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad$ Heap

$\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad$ 1021

$\quad\quad\quad\quad$ arr | 1021 | $\quad\quad\quad$ | 10 | 20 | 14 | 16 | 25 |

Book b1 = new Book

Book b2 = new Book

b1 = b2

P

GC

| 1 | 2 | 3 | 4 | 5 | 0 | | 8 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

arr = new Array (5)

arr = new Array (25)

arr

0   1   2   3   Key = 8
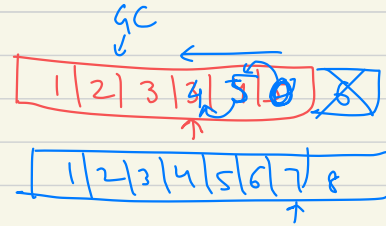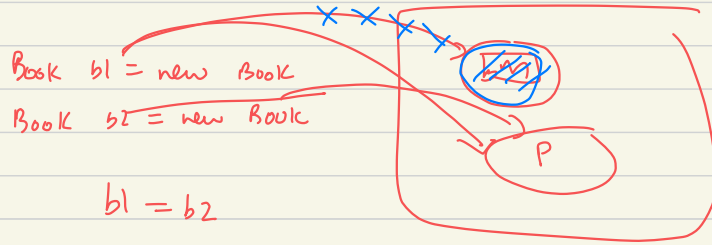
    10 , 20 , 15 , 8 , 6

                                          output . 3

            Java
   ∘ Pass By Value   &
                    Pass By Reference

                        C++