DAY-17 Min & Man I kap Insplanentations. min Hop Implementation. class Minteap:
def -init (self): self. heaplist = [0] sey . current-size = 0 def eift_up (3elf,i): While 1/12 >0: if self heap listli] a self loop list[i/2]: self. heap. 1stri], self. loap 1st[1/2] = self bearist[1], self heap list[1] It the above were swapped def insert (self, k):

self. houp-list.append(k) self. current-size = 1 seif. sift-up (self, current give) de sift-down (self,i) while (i*2) == self. current_size: me = self. min-child (i) if self. heap list [i] 2 self. heap-list [mi] self heap listli], self hoap list me] = self. heap_list[mc], self. heap_list[i]

def min-child (self, i): if (i*2)+1> self. current_size: else: if self. heap-1. st[i*2] = self heap 1:st[i*2] 1] return ix 2 return (i * 2)+1 des delete min (self): if len (self, heap-list) == 1: return " Empty Heap" root = sold bearp- 17st 1) self. heap list [] = self leap list self Eurensis current size # self hearp list - = saff heapplist
last vaule popped. self. current size == 1 self. sift down(1: return root.