

السلام عليكم

# Our Project Or Task

# Main points

- Selection sort
- Linked lists
- How to sort linked list using selection sort
- Example
- Practical Example

# Selection Sort

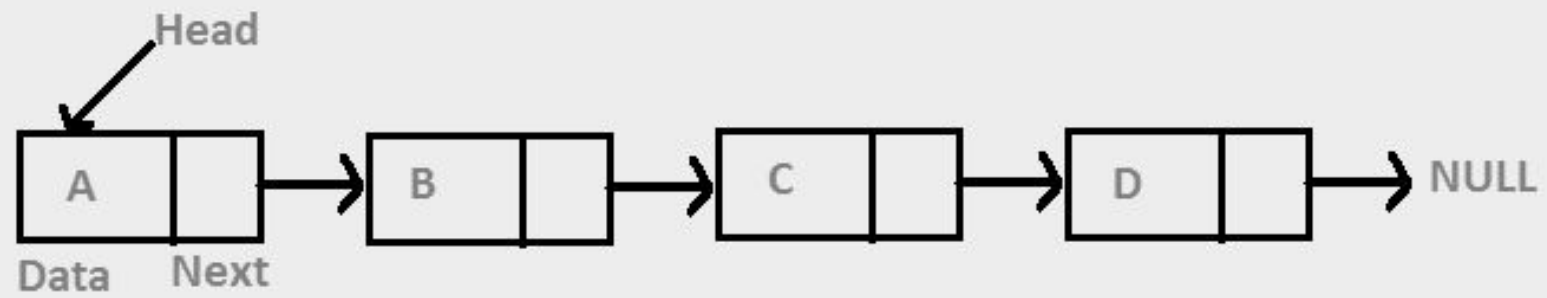
You Remember It ?!

5 3 4 1 2

Selection Sort

# Linked Lists

You Remember It ?!



# Steps To solve the problem

- Creating linked list class
- Creating node class

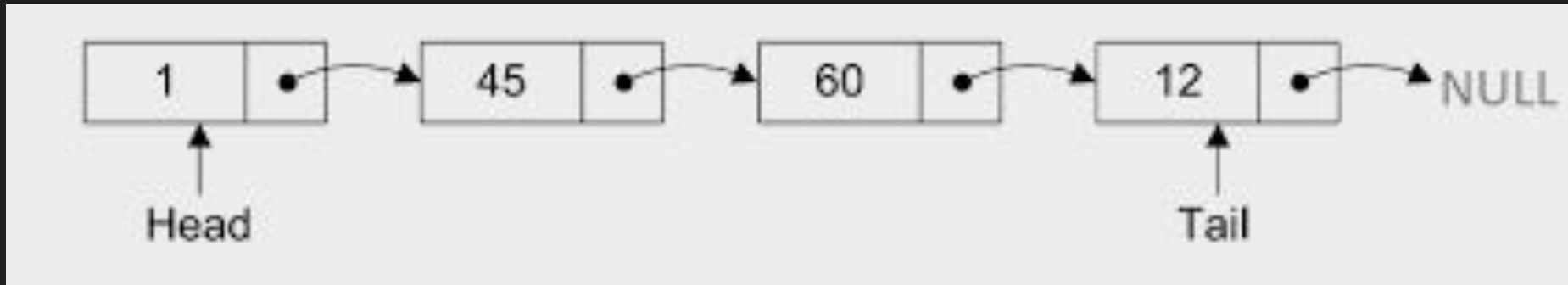


# Steps To solve the problem

- Find the smallest element in the linked list
- Swapping it

# Swapping

# Let us have an example



# code

```
class Node:
    def __init__(self, data=None):
        self.data = data
        self.next = None

    def data(self):
        return self.data

    def next(self):
        return self.next

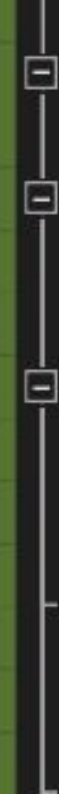
    def setData(self, newdata):
        self.data = newdata

    def setNext(self, newnext):
        self.next = newnext
```

```
- class LinkedList:
    def __init__(self):
        self.head = None

    def addv(self, data):
        node = Node(data)
        node.next = self.head
        self.head = node

    def printlist(self):
        temp = self.head
        ls = []
        while temp:
            ls.append(temp.data)
            temp = temp.next
        print(ls)
```



```
def selsort(self):  
    cur = self.head  
    while cur.next is not None:  
        min = cur  
        cmp = cur.next  
        while cmp is not None:  
            if cmp.data < min.data:  
                min = cmp  
            cmp = cmp.next  
  
        min.data, cur.data = cur.data, min.data  
        cur = cur.next
```

# Practical Example

# Suggestions for edits



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# Thank You