

# DAY-6

## Introduction to "Priority Queue"

→ An abstract data structure.

→ somewhere like a normal Queue.  
but where each item had a  
special "key" to quantify its "priority".

\* In short, Not based on  
absolutely FIFO. but based  
on their "priority".

⇒ Priority Queue can be  
used to extract minimum efficiently  
when implementing "Dijkstra's  
Algorithm".

⇒ To store ~~minimum~~ keys  
of nodes and extract minimum key node  
at every step.

⇒ Used in data compression.



## Implementation of Priority Queue Using list:-

NOTE: \* need to sort, everytime  
an item is added.

```
cricPlayers = []
```

```
cricPlayers.append((99, "Dhoni"))
```

# No sort, 'coz only one item.

```
cricPlayers.append((42, "DKarthik"))
```

```
cricPlayers.sort(reverse=True)
```

# sorted to maintain order.

```
cricPlayers.append((56, "KL Rahul"))
```

```
cricPlayers.sort(reverse=True)
```

# sorted to keep order.

```
while cricPlayers:
```

```
    print(cricPlayers.pop(0))
```

O/P! —

will be as:- Dhoni, KL Rahul, DKarthik.