customer +arrivalTime: float +startOfService: float +departTime: float +hasArrived: bool +nextCustomer: customer* +customer() p_queue +head: customer* +currentSize: int +MAXSIZE: int = 200 +theLine: customer** +p_queue() +insert(customer*)

+pop(): customer*

+swap(int,int)

+perkDown(int)
+perkUp(int)

+getLeftChild(int): int

+getRightChild(int): int

+getParent(int): int

```
simulation
+fifo_queue: std::queue
+my_pq: p_queue
+n: int
+customersInSystem: int
+lambda: int
+mu: int
+servers: int
+simTime: float
+idleTime: float
+serviceTime: float
+waitedInLineTime: float
+availableSerevers: int
+waitedInQueue: int
+timeInSim: float
+promt(int*,int*,int*,int*)
+getIdleTime(float,float,float): float
+factorial(int): int
+getPeopleInSystem(float,float,float,float): float
+displayStats(int*,int*,int*)
+getCustomerTime(float,float): float
+getCustomersInQueue(float,float,float): float
+getRho(float,float,float): float
+getNextRandomInterval(int): float
+showResults(int*,int*,int*,float*,float*,
             float*,float*,float*)
```