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Priority queue Implementation

```
#define MAX 5
int pri_Q[MAX];
int front = -1, rear = -1;
check (x)
{
  for (int i=0; i<=rear; i++) {
    if (x >= pri_Q[i])
    {
      for(j= rear+1 ; j>i ; j--)
      {
        pri_Q[j] = pri_Q[j-1];
      }
      pri_Q[i] = x;
      return;
    }
  }
  pri_Q[i] = x;
}
insert (x)
{
  if (rear >= MAX-1)
    printf ("\n Queue Overflow");
  if (front == -1 && rear == -1)
  {
    front ++;
    rear ++;
    pri_Q[rear] = x;
  }
```

```
else {
    check (x);
    rear ++;
}

delete(x)
{
    int i;
    if (front == -1 && rear == -1)
        printf ("\n Queue is Empty");
    else {
        for (i=0; i<=rear; i++)
        {
            if (x == pri_Q[i])
            {
                for( ; i<rear; i++)
                    pri_Q[i] = pri_Q[i+1]

                pri_Q[i] = -99;
                rear--;
                if (rear == -1)
                    front = -1;
                return;
            }
        } printf("Element not found");
    }

display ()
{
    if (front = rear = -1)
        printf ("\n Empty Queue");
    while (front <= rear)
    {
```

```
        printf("%d", pri_Q[front]);
        front++;
    }
    front = 0;
}
```