

[illegible]

```

def constructST( hist, n):
    x = (int)(ceil(log2(n)))
    max_size = 2 * (int)(2**x) - 1
    st = [0] * (max_size)
    constructSTUtil(hist, 0, n - 1, st, 0)
    return st

def max_area_histogram(hist):
    area=0
    st = constructST(hist, len(hist))
    try:
        def fun(left,right):
            nonlocal area
            if left==right:
                return
            index = RMQ(hist,st, len(hist), left, right-1)
            area=max(area,hist[index]*(right-left))
            fun(index+1,right)
            fun(left,index)
            return

        fun(0,len(hist))
        return(area)

    except:
        pass

hist = [6, 2, 5, 4, 5, 1, 6]
print("Maximum area is",
      max_area_histogram(hist))

```