

Question 3

(a)

```
maxSumTabulate(A):  
    n = A.length  
    T is a table/array of length n  
    max = T[0]  
    for(k = 1; k < n; k++):  
        T[k] = max(T[k - 1] + A[k], A[k])  
        if(T[k] > max):  
            max = T[k]  
    return max
```

(b)

There is one loop that iterates over all n entries, and the cost within the loop is fixed. So, the cost is $\Theta(n)$.