

Hello World

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1 Hello China

China is in East Asia.

SK66-Algorithm(G)

```
1  run Dijkstra's algorithm to calculate  $D(v_i, v_j)$ ,  $v_i, v_j \in s \cup V_s \cup t$ 
2  let  $F = (f_{\eta, i})$  be a new  $|V_s| \times |V_s|$  matrix
3  for  $i = 1$  to  $|V_s|$ 
4      do  $F_{1, i} \leftarrow D(v_i, v_j)$ 
5  for  $\eta = 2$  to  $|V_s|$ 
6      do for  $l = 1$  to  $|V_s|$ 
7          if  $\eta == l$ 
8              then continue
9          else  $F_{\eta, l} = \min(F_{\eta, l}, D(v_i, v_j) + F_{\eta-1, l})$ 
```

INSERTION-SORT(A)

```
1  for  $j \leftarrow 2$  to  $\text{length}[A]$ 
2      do  $\text{key} \leftarrow A[j]$ 
3           $\triangleright$  Insert  $A[j]$  into the sorted sequence  $A[1 \dots j-1]$ .
4       $i \leftarrow j - 1$ 
5      while  $i > 0$  and  $A[i] > \text{key}$ 
6          do  $A[i+1] \leftarrow A[i]$ 
7               $i \leftarrow i - 1$ 
8       $A[i+1] \leftarrow \text{key}$ 
```

HASH-INSERT(T, k)

```
1   $i \leftarrow 0$ 
2  repeat  $j \leftarrow h(k, i)$ 
3      if  $T[j] = \text{NIL}$ 
4          then  $T[j] \leftarrow k$ 
5          return  $j$ 
6      else  $i \leftarrow i + 1$ 
7  until  $i = m$ 
8  error hash table overflow
```

```

DAG-SHORTEST-PATHS( $G, w, s$ )
1  topologically sort the vertices of  $G$ 
2  INITIALIZE-SINGLE-SOURCE( $G, s$ )
3  for each vertex  $u$ , taken in topologically sorted order
4      do for each vertex  $v \in Adj[u]$ 
5          do RELAX( $u, v, w$ )

```