

```

Sort jobs by finish times so that  $f(1) \leq f(2) \leq \dots \leq f(n)$ .
 $A \leftarrow \emptyset$ 
for j = 1 to n {
    if (job j compatible with A)
         $A \leftarrow A \cup \{j\}$ .
}
return A

```

```

Sort intervals by starting time so that  $s_1 \leq s_2 \leq \dots \leq s_n$ .
d  $\leftarrow$  0

for j = 1 to n {
    if (lect j is compatible with some classroom k,  $1 \leq k \leq d$ )
        schedule lecture j in classroom k
    else
        allocate a new classroom d + 1
        schedule lecture j in classroom d + 1
        d  $\leftarrow$  d + 1
}

```

- 1、实现以上算法（Interval Scheduling / Partitioning）中的任一个。
 - 2、提交报告一份。需包含以下内容：核心源代码、构造的数据、运行结果。
 - 3、编程语言不限。
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```

Kruskal(G, c) {
    Sort edge weights so that  $c_1 \leq c_2 \leq \dots \leq c_m$ .
     $T \leftarrow \emptyset$ 

    foreach ( $u \in V$ ) make a set containing singleton  $\{u\}$ 

    for i = 1 to m
        Let  $(u, v) = e_i$ 
        if (u and v are in different sets) {
             $T \leftarrow T \cup \{e_i\}$ 
            merge the sets containing u and v
        }
    return T
}

```

- 1、实现上述最小生成树算法。
- 2、提交报告一份。需包含以下内容：核心源代码、构造的数据、运行结果。
- 3、编程语言不限。