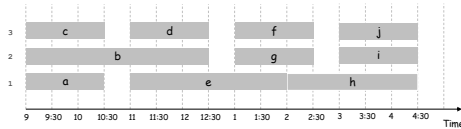
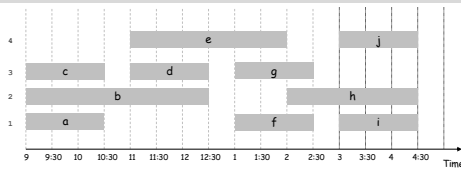


# Interval Partitioning Problem



# Greedy Algorithm

```
Sort intervals by starting time so that  $s_1 \leq s_2 \leq \dots \leq s_n$ .
d ← 0 #Number of allocated classrooms
for j = 1 to n {
  if (lecture j is compatible with some classroom k)
    schedule lecture j in classroom k
  else
    allocate a new classroom d + 1
    schedule lecture j in classroom d + 1
    d ← d + 1
}
```