

General Iterative Improvement Procedure:

Given initial candidate solution s

While (s is not a local optimum)

```
{  
  choose a neighbour  $s'$  of  $s$  such that  
     $g(s') < g(s)$   
   $s := s'$  /* an improving step */  
}
```

In Iterative Best Improvement, the best neighbor is selected as the neighbor where we move. On the other hand, Iterative first Improvement tries to avoid the time complexity of evaluating all neighbors by performing the first improving step encountered during the inspection of the neighborhood.