
Algorithm 1 FVFI + Piecewise Linear Interpolation + Grid

```
initialize  $v$  (array of size:  $N$ )
initialize  $v'$  (array of size:  $N$ )
initialize  $x_{grid} = (x_i)_{i=1}^N$ 
repeat
  for  $i = 1$  to  $N$  do
     $v'(x_i) \leftarrow \max_{c \in \Gamma(x)} \{u(c) + \beta \text{interp}(x_{grid}, v, x - c)\}$ 
  end for
  set  $e = d_\infty(v, v')$ 
  set  $v = v'$ 
until  $e$  is less than some tolerance
```
