

## 1 Solution of 2

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**Algorithm 1** Optimising projects

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```
function OPTIMAL( $N, H$ )
  for  $i \leftarrow 0$  to  $H$  do
    Optimal[0][ $i$ ]  $\leftarrow 0$ 
  end for
  for  $i \leftarrow 0$  to  $N$  do
    Optimal[ $i$ ][0]  $\leftarrow 0$ 
  end for
   $id \leftarrow 1$ 
  for  $n \leftarrow 1$  to  $N$  do
    for  $h \leftarrow 1$  to  $H$  do
      Optimal[ $n$ ][ $h$ ]  $\leftarrow \max_{i=0}^h (f_{id}[i] + \text{Optimal}[n-1][h-i])$ 
      Let the maximum be achieved for  $i$ 
      Schedule Project  $id$  for time  $i$ 
       $id \leftarrow id + 1$ 
    end for
  end for
end function
```

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