

procedure (1 + 1) FEA($f : \mathbb{X} \mapsto \mathbb{N}$)

$H \leftarrow (0, 0, \dots, 0);$

randomly sample x_c from \mathbb{X} ; $y_c \leftarrow f(x_c);$

$x_B \leftarrow x_c$; $y_B \leftarrow y_c$;

while \neg terminate **do**

$x_n \leftarrow \text{move}(x_c)$; $y_n \leftarrow f(x_n);$

$H[y_c] \leftarrow H[y_c] + 1$; $H[y_n] \leftarrow H[y_n] + 1$;

if $H[y_n] \leq H[y_c]$ **then**

$x_c \leftarrow x_n$; $y_c \leftarrow y_n$;

if $y_c < y_B$ **then** $x_B \leftarrow x_c$; $y_B \leftarrow y_c$;

return x_c, y_c