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

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

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

$x_{\mathrm{B}} \leftarrow x_c$; $y_{\mathrm{B}} \leftarrow y_c$;

while $\neg$ terminate **do**

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

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

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

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

if $y_c < y_{\mathrm{B}}$ **then** $x_{\mathrm{B}} \leftarrow x_c$; $y_{\mathrm{B}} \leftarrow y_c$;

return x_{B}, y_{B}