procedure $SA(f : X \mapsto \mathbb{R}, T_0, \varepsilon)$ randomly sample x_c from $X: y_c \leftarrow f(x_c)$:

then

 $x_n \leftarrow move(x_c); y_n \leftarrow f(x_n);$

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

if $y_n \leq y_c$

while ¬ terminate do