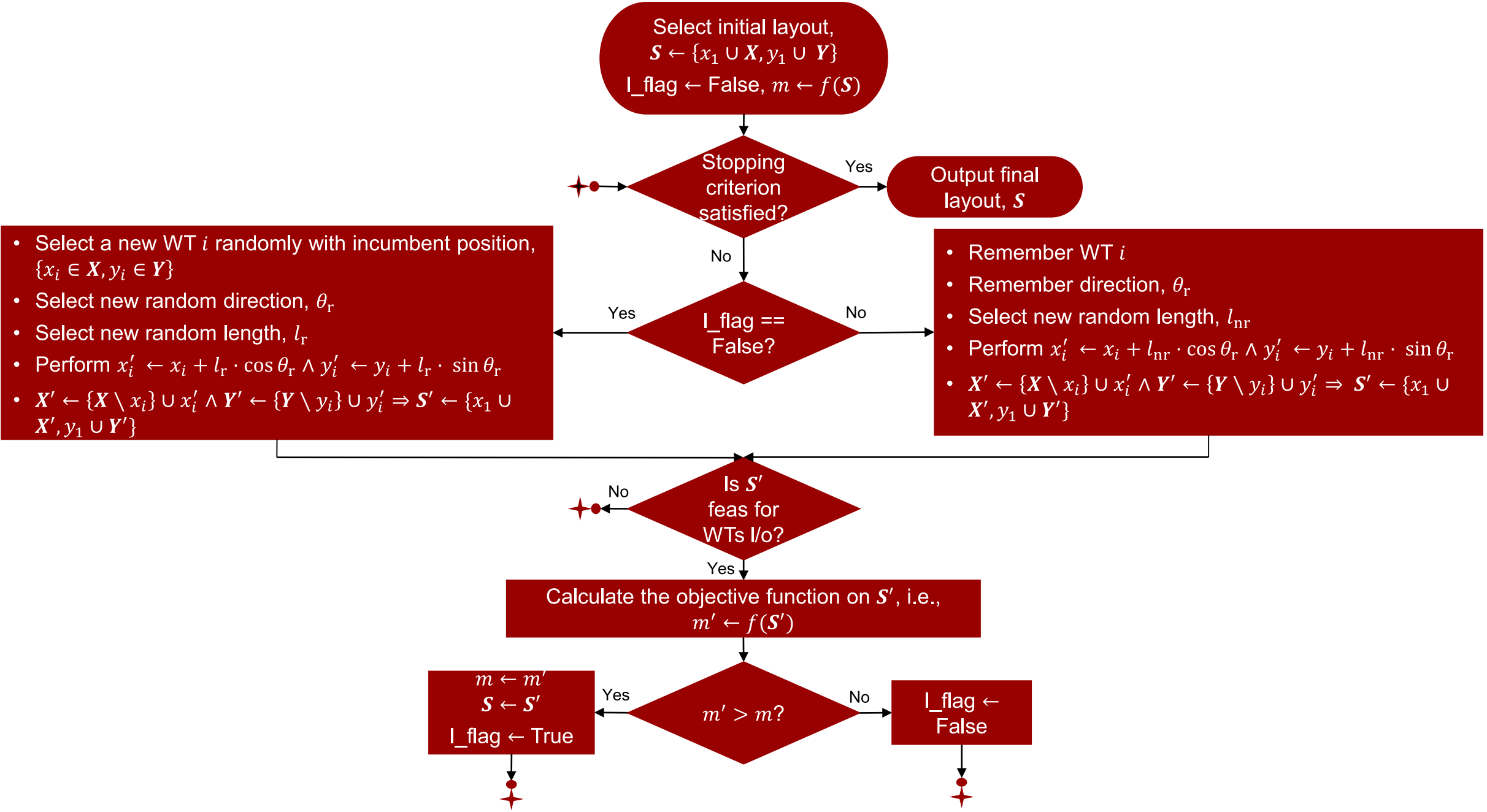
Select initial layout,
$\boldsymbol{S} \leftarrow \{x_1 \cup \boldsymbol{X}, y_1 \cup \boldsymbol{Y}\}$
I_flag ← False, $m \leftarrow f(\boldsymbol{S})$
Stopping criterion satisfied?
Yes
Output final layout, $\boldsymbol{S}$
No
I_flag == False?
Yes
No
Select a new WT i randomly with incumbent position, $\{x_i \in \boldsymbol{X}, y_i \in \boldsymbol{Y}\}$
Select new random direction, θ_{r}
Select new random length, l_{r}
Perform $x_i' \leftarrow x_i + l_{\mathrm{r}} \cdot \cos\theta_{\mathrm{r}} \wedge y_i' \leftarrow y_i + l_{\mathrm{r}} \cdot \sin\theta_{\mathrm{r}}$
$\boldsymbol{X}' \leftarrow \{\boldsymbol{X} \setminus x_i\} \cup x_i' \wedge \boldsymbol{Y}' \leftarrow \{\boldsymbol{Y} \setminus y_i\} \cup y_i' \Rightarrow \boldsymbol{S}' \leftarrow \{x_1 \cup \boldsymbol{X}', y_1 \cup \boldsymbol{Y}'\}$
Remember WT i
Remember direction, θ_{r}
Select new random length, l_{nr}
Perform $x_i' \leftarrow x_i + l_{\mathrm{nr}} \cdot \cos\theta_{\mathrm{r}} \wedge y_i' \leftarrow y_i + l_{\mathrm{nr}} \cdot \sin\theta_{\mathrm{r}}$
$\boldsymbol{X}' \leftarrow \{\boldsymbol{X} \setminus x_i\} \cup x_i' \wedge \boldsymbol{Y}' \leftarrow \{\boldsymbol{Y} \setminus y_i\} \cup y_i' \Rightarrow \boldsymbol{S}' \leftarrow \{x_1 \cup \boldsymbol{X}', y_1 \cup \boldsymbol{Y}'\}$
Is $\boldsymbol{S}'$ feas for WTs I/o?
No
Yes
Calculate the objective function on $\boldsymbol{S}'$, i.e., $m' \leftarrow f(\boldsymbol{S}')$
$m' > m$?
Yes
No
$m \leftarrow m'$
$\boldsymbol{S} \leftarrow \boldsymbol{S}'$
I_flag ← True
I_flag ← False