

input: S

goto loop

$x \leftarrow \text{phi}(1, x')$

$t_1 = S/x$

$t_2 = x + t_1$

$x' = t_2/2$

$i \leftarrow \text{phi}(0, i')$

$i' \leftarrow i + 1$

$C \leftarrow i' < n$

If c goto loop else exit

return x

input: S

goto loop

$x \leftarrow \text{phi}(1, x')$

$t_1 = S/x$

$t_2 = x + t_1$

$x' = t_2/2$

$i \leftarrow \text{phi}(0, i')$

$i' \leftarrow i + 1$

$C \leftarrow i' < n$

If c goto loop else exit

return x