

1. Rewrite the following pseudocode segment using a loop structure in the specified languages:

$k = (j + 13) / 27$

loop:

if $k > 10$ **then goto** out

$k = k + 1$

$i = 3 * k - 1$

goto loop

out: . . .

b. Python:

$j=1$

$i=1$

$k=(j+13)/27$

while $k \leq 10$:

$k+=1$

$i=3*k-1$

2. Redo Programming Exercise 1, except this time make all the variables and constants floating-point type, and change the statement $k=k+1$ to $k=k+1.2$

$j=1.0$

$i=1.0$

$k=(j+13.0)/27.0$

while $k \leq 10.0$:

$k+=1.2$

$i=3.0*k - 1.0$

3.