

Inputs

- 3 integer values from keyboard

Outputs

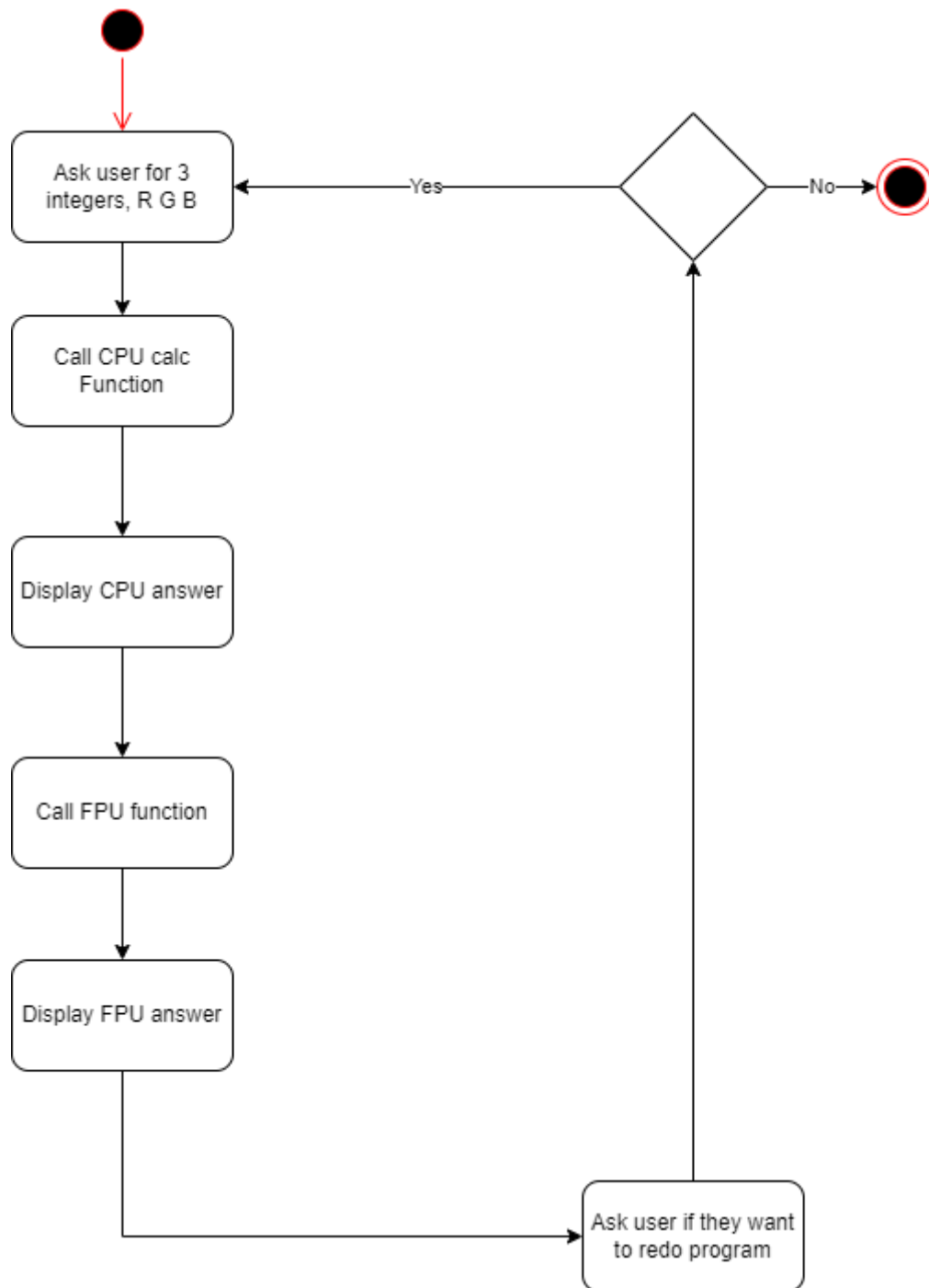
- Message asking for user to input 3 integer values
- Message displaying final CPU answer
- Message displaying final FPU answer
- Message asking if user wants to continue program or exit

Variables

- Output – BYTE for saying display function final CPU answer: msgCPU
- Output – BYTE for saying display function final FPU answer: msgFPU
- Output – BYTE message for input integer of B: msgB
- Output – BYTE message for input integer of G: msgG
- Output – BYTE message for input integer of R: msgR
- Output – BYTE for asking user if they want to exit program: msgExit

Algorithm

1. Ask user to input 3 strings (R,G,B)
2. Call a function to get the CPU calculation $[R * 3 / 10 + G * 6 / 10 + B * 1 / 10]$
3. Display CPU answer
4. Call a function to get the FPU calculation $[R * 0.299 + G * 0.587 + B * 0.114]$
5. Display FPU answer
6. Ask user if they want to exit or repeat program



Ariel Sischy

221003350

Prac 08

Stack Diagrams

GrayScaleCPU Function

B
G
R
return address
Old EBP
3/10
6/10
Final CPU answer
EBX
ECX
EDX
FLAGS <-ESP

greyScaleFPU function

B
G
R
return address
Old EBP
114
587
229
$B * 114$
$G * 587$
$R * 229$
Final answer
EAX
EBX
ECX
EDX
FLAGS <-ESP

Ariel Sischy
221003350
Prac 08

Main function

return address
Old EBP
R
G
B