

## Inputs

- 1 Integer from Keyboard

## Outputs

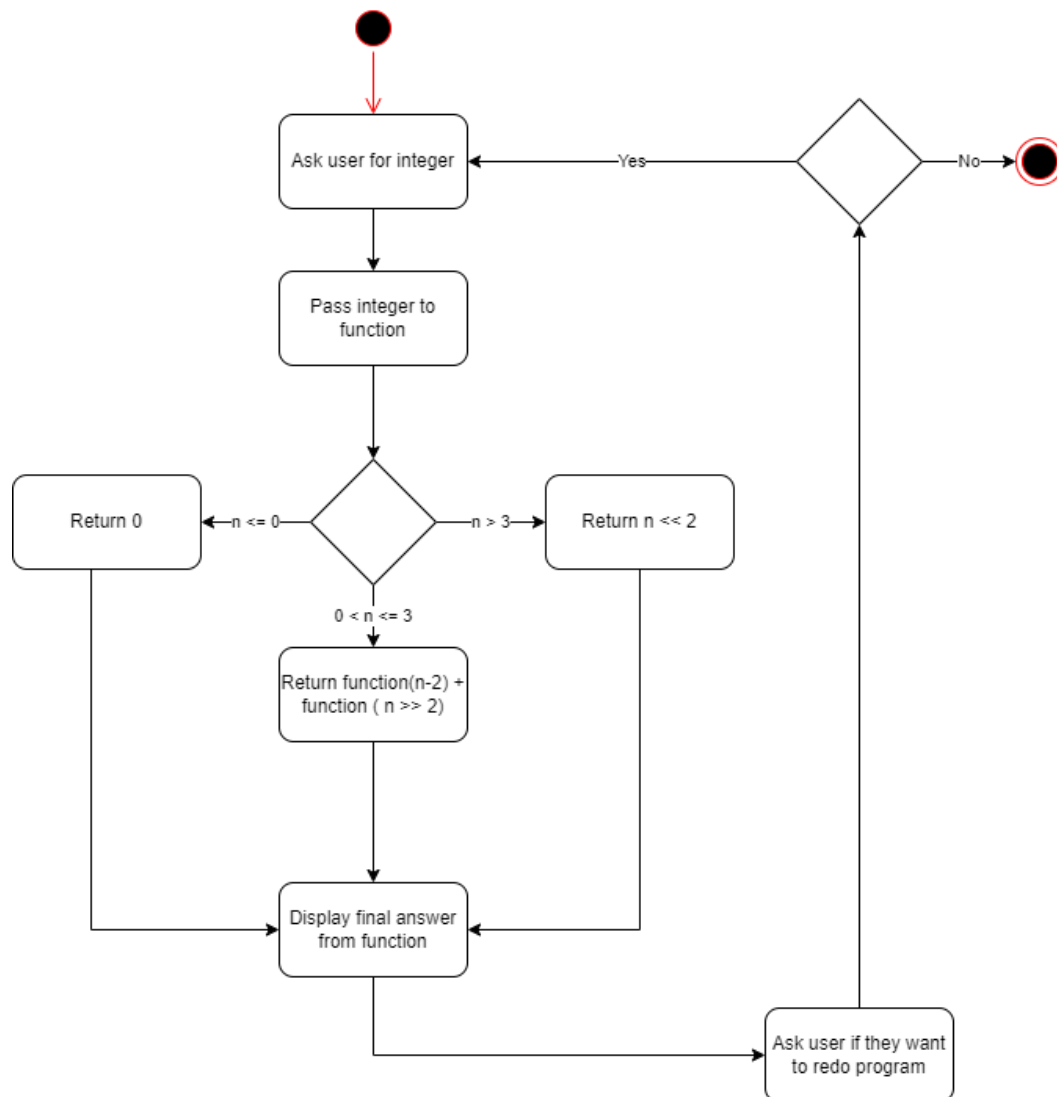
- Message asking for user to input 1 integer
- Message displaying final answer
- Message asking if user wants to continue program or exit

## Variables

- Output – BYTE for saying display function final answer: msgOutput
- Output – BYTE message for saying input integer for function: msgInput
- Output – BYTE for asking user if they want to exit program: msgExit
- Output – BYTE for formatting, space: msgSpace

## Algorithm

1. Ask user to input an integer
2. Call a function(n), where n is user integer
3. If  $n \leq 0$ , return 1
4. If  $n > 3$ , return  $\text{function}(n-2) + \text{function}(n >> 2)$
5. If  $0 < n \leq 3$ , return  $n << 2$
6. Ask user if they want to exit or repeat program



## Stack Diagrams

### Falkor Function

eax
return address
Old EBP
EDX
ECX
EBX
FLAGS <- ESP