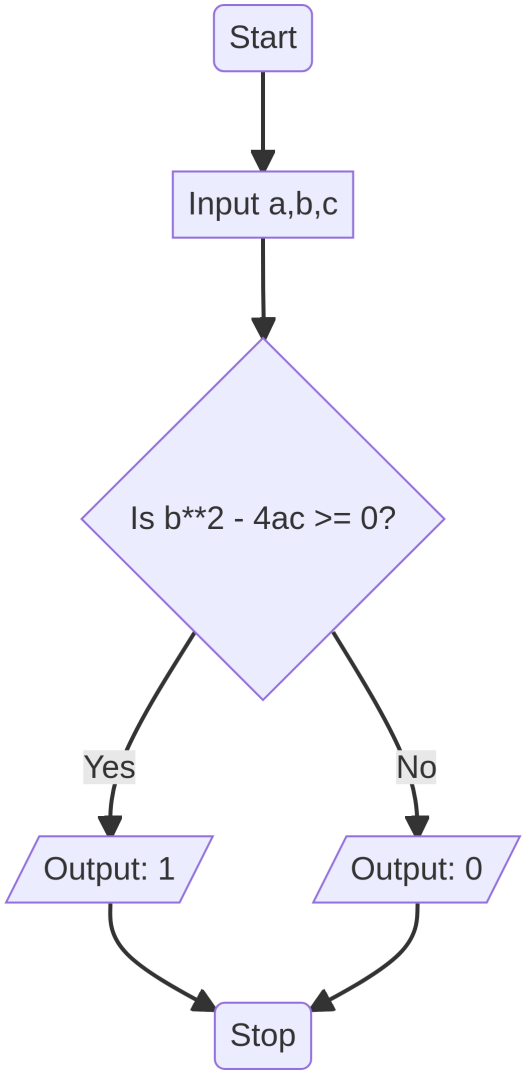
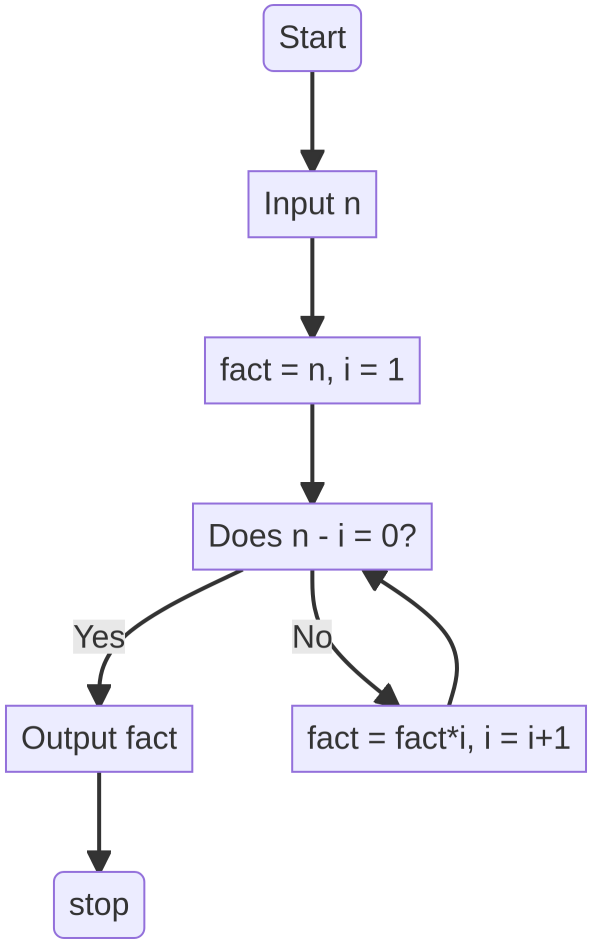
Homework 2

Colin Gibbons-Fly

Exercise 4: Develop an algorithm that takes in three real numbers a, b, and c with a =! 0 and determines the roots of the quadratic polynomial ax^2 + bx + c are real or not. If the roots are real, the output should be a 1. If the roots are complex, the output should be 0. Draw a flowchart or give the Python code for your algorithm.



Exercise 5: Develop an algorithm for computing n!. Draw a flowchart or write Python code for your algorithm.


Start
Input n
fact = n, i = 1
Does n - i = 0?
Yes
No
Output fact
fact = fact*i, i = i+1
stop