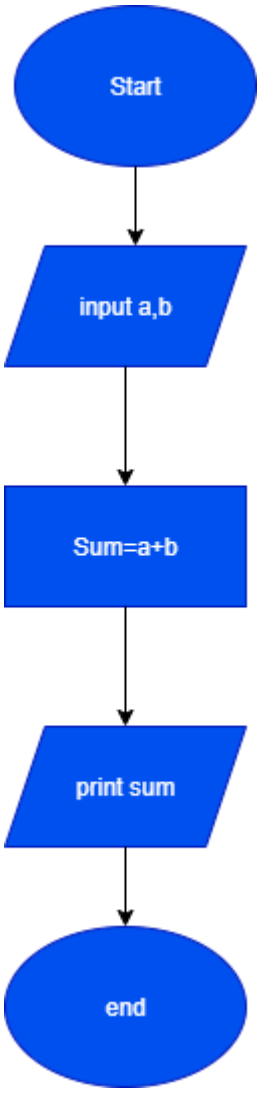
Assignment OOP 1

Sum of Two Integers

Algorithm:

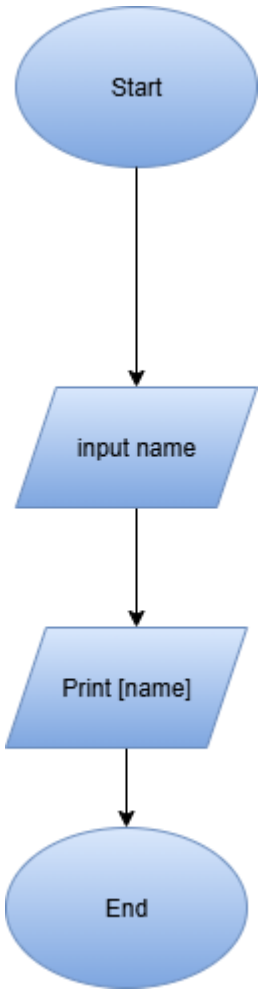
1. Start
2. Read two integers a and b
3. Calculate sum = a + b
4. Print sum
5. End



Q2 - Print Hello with Name

Algorithm:

1. Start
2. Read a name from the user
3. Print “Hello, [name]!”
4. End



Q3 - Product of Two Floating-Point Numbers

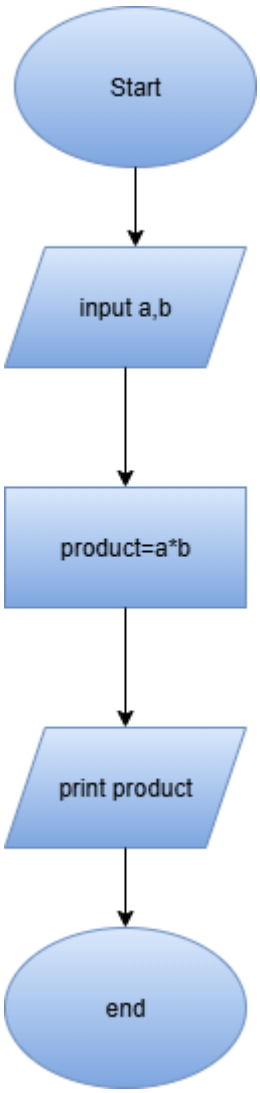
Algorithm:

1. Start

2. Read two float numbers x and y

3. Calculate product = x * y

4.end



Q4 - Check if Number is Odd or Even

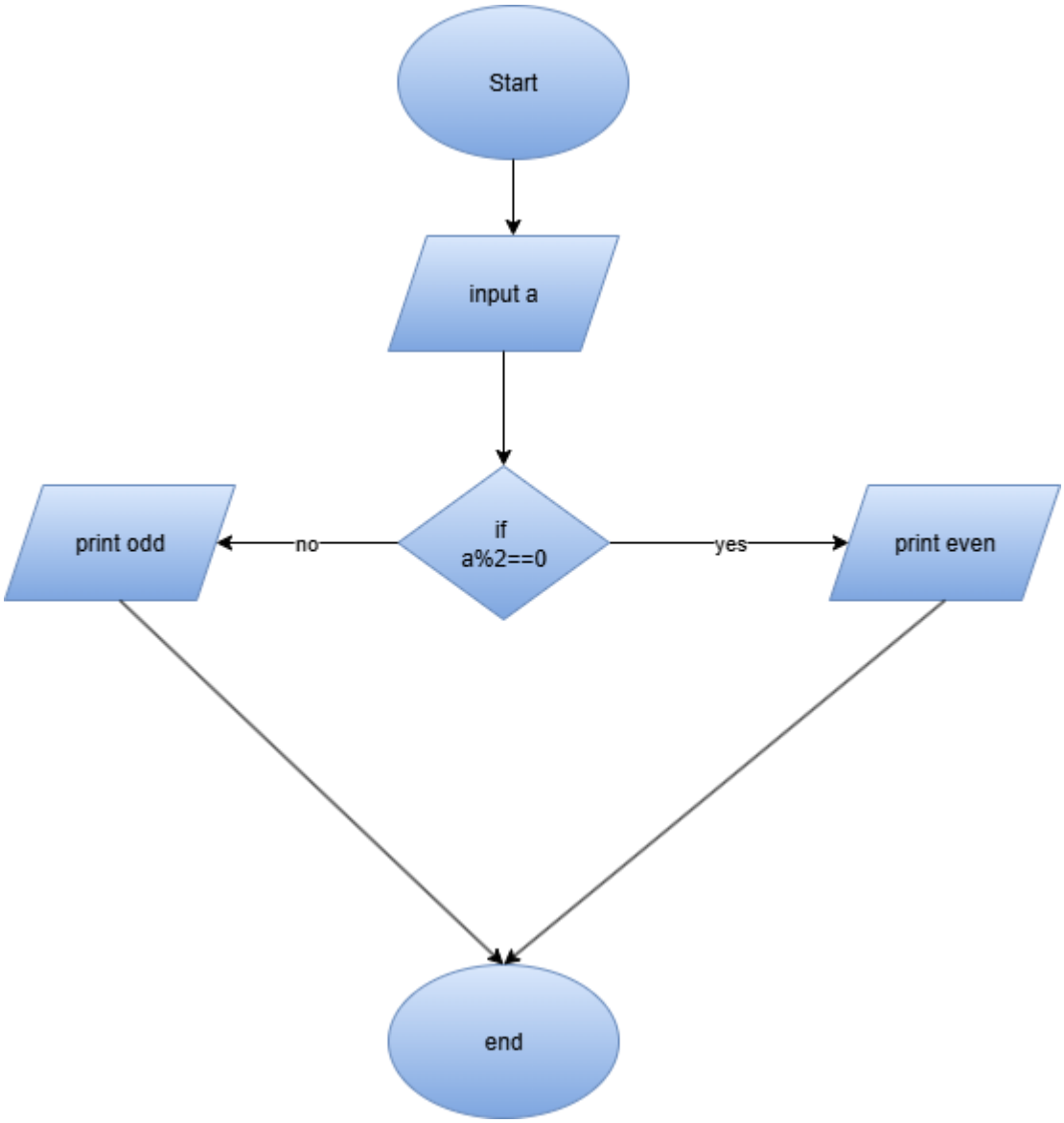
Algorithm:

1. Start
2. Read integer n
3. If n % 2 == 0 then

    Print “Even”

    Else

    Print “Odd”
4. End



Q5 - Check if Number is Positive, Negative, or Zero

Algorithm:

1. Start

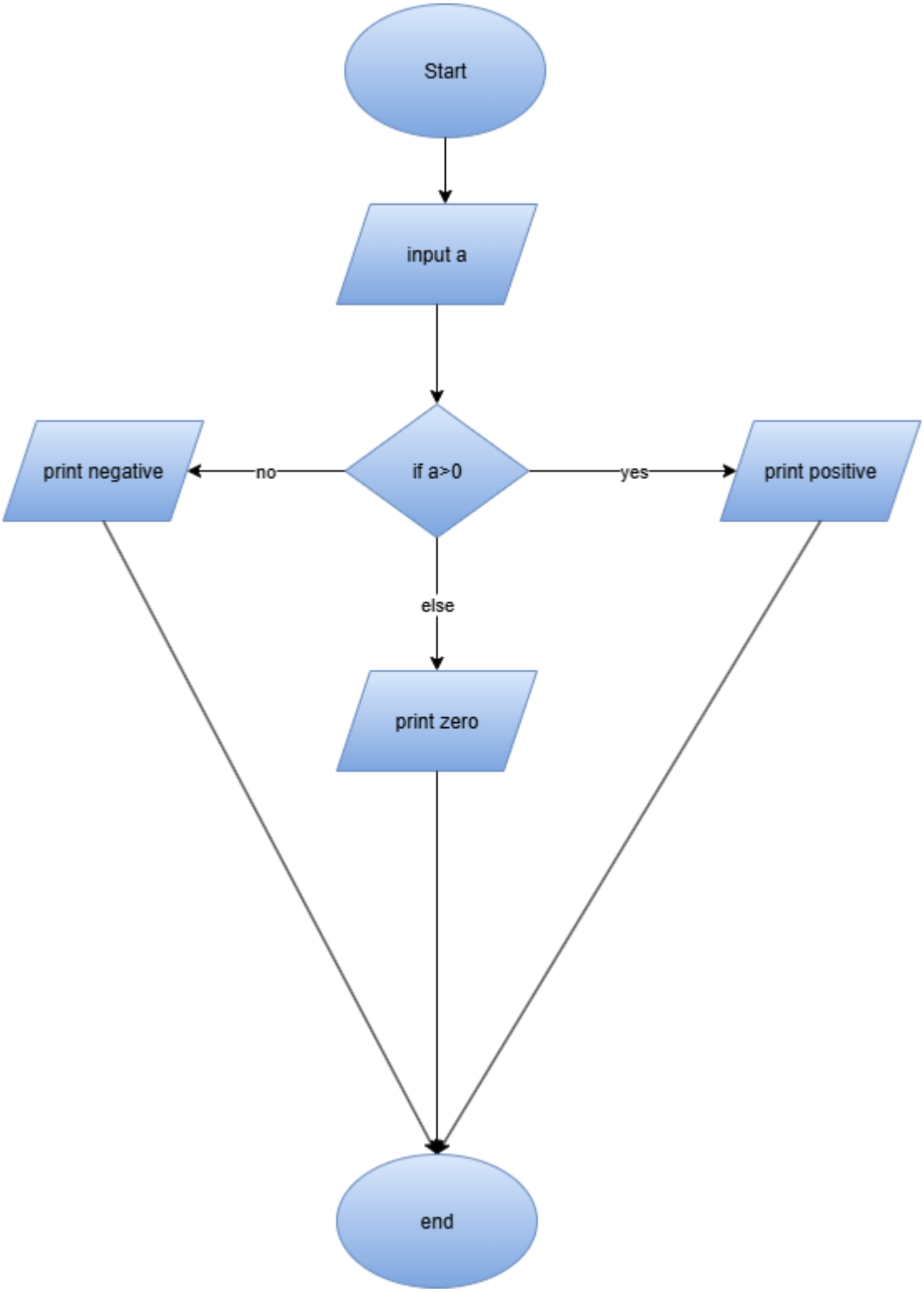
2. Read integer n

3. If n > 0, print “Positive”

   Else if n < 0, print “Negative”

   Else, print “Zero”

4.end

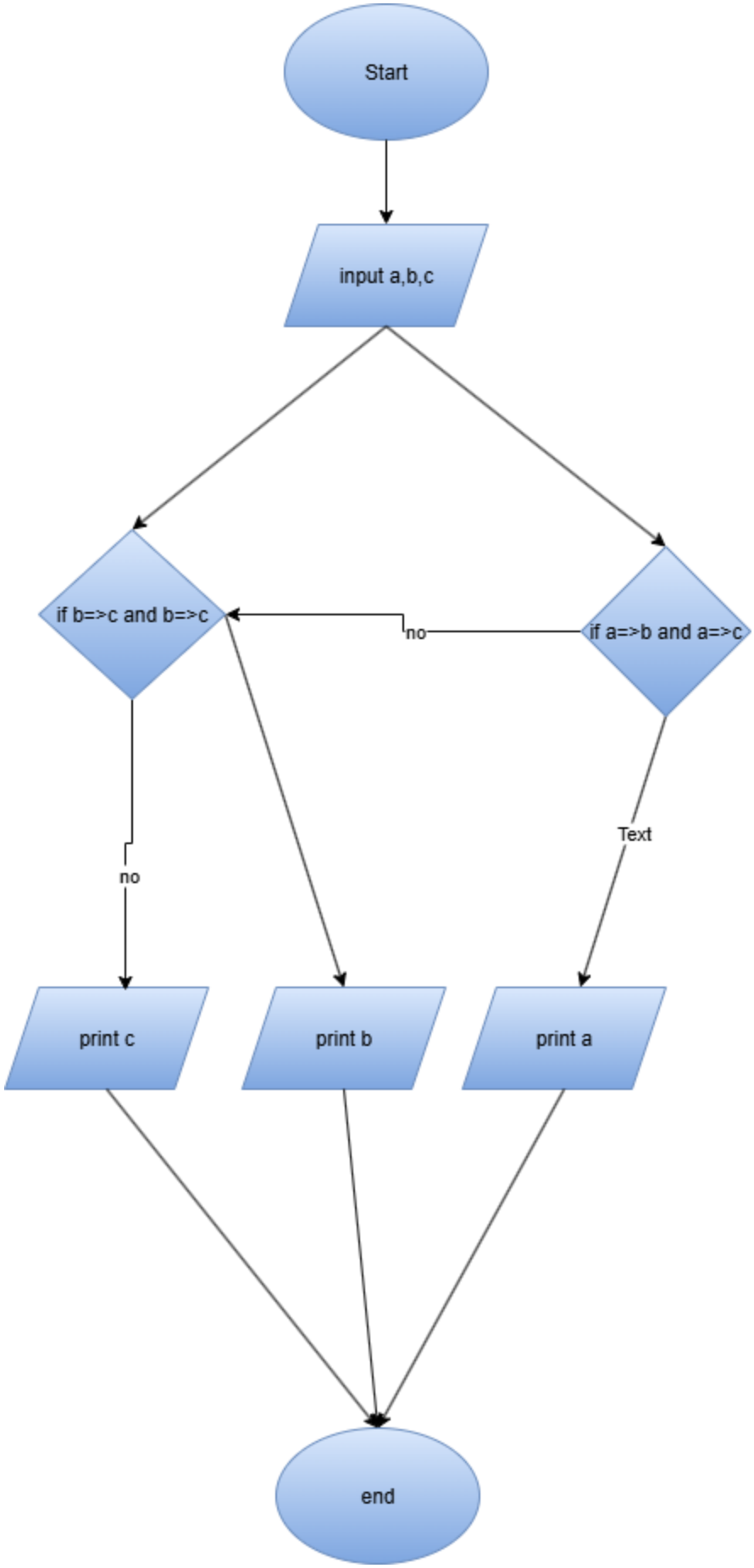


Q6 - Print Largest of Three Numbers

Algorithm:

1. Start
2. Read three numbers a, b, c
3. Set largest = a
4. If b > largest, set largest = b
5. If c > largest, set largest = c
6. Print largest

7.end


Start
input a,b,c
if b=>c and b=>c
no
if a=>b and a=>c
no
Text
print c
print b
print a
end

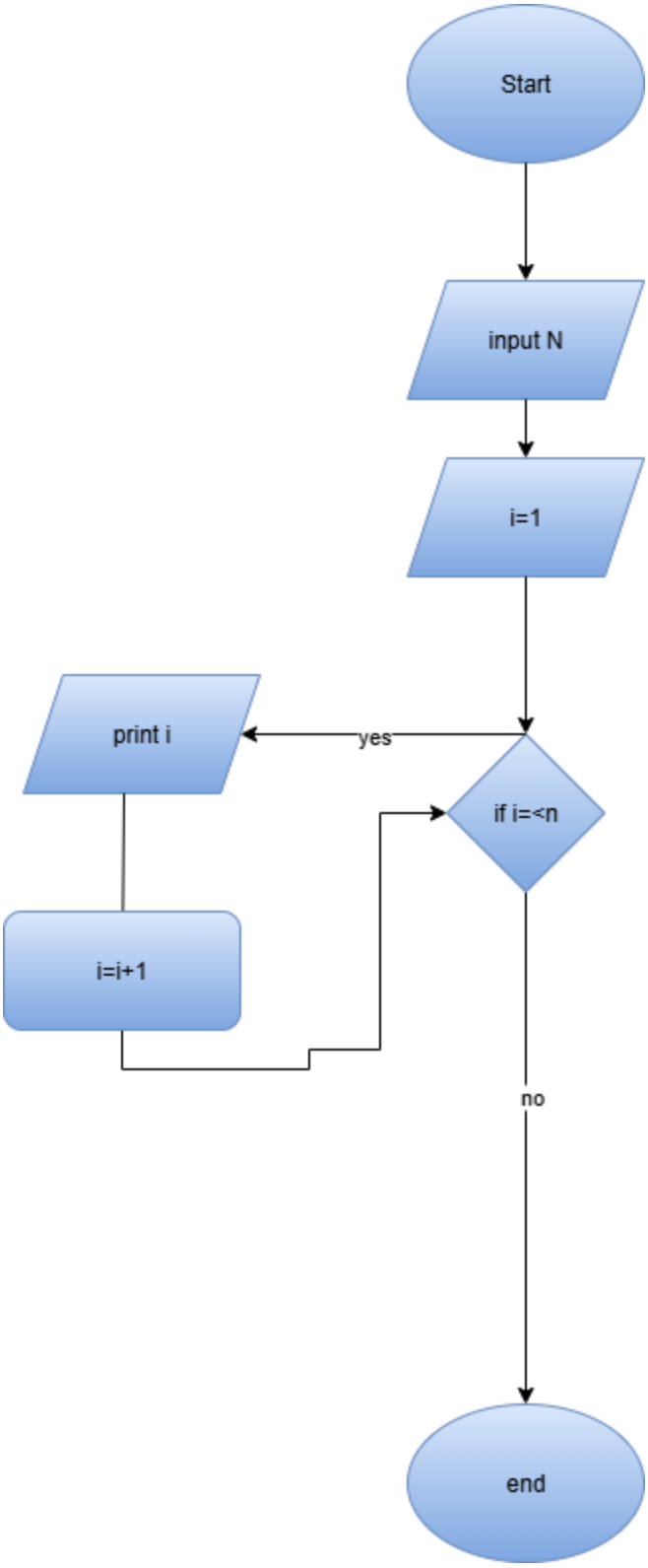
Q7 - Print Numbers from 1 to N

Algorithm:

1. Start
2. Read integer N
3. Set counter i = 1
4. While i <= N do:

    Print i

    Increment i by 1
5. End


Start
input N
i=1
print i
yes
if i=<n
i=i+1
no
end

Q8 - Multiplication Table

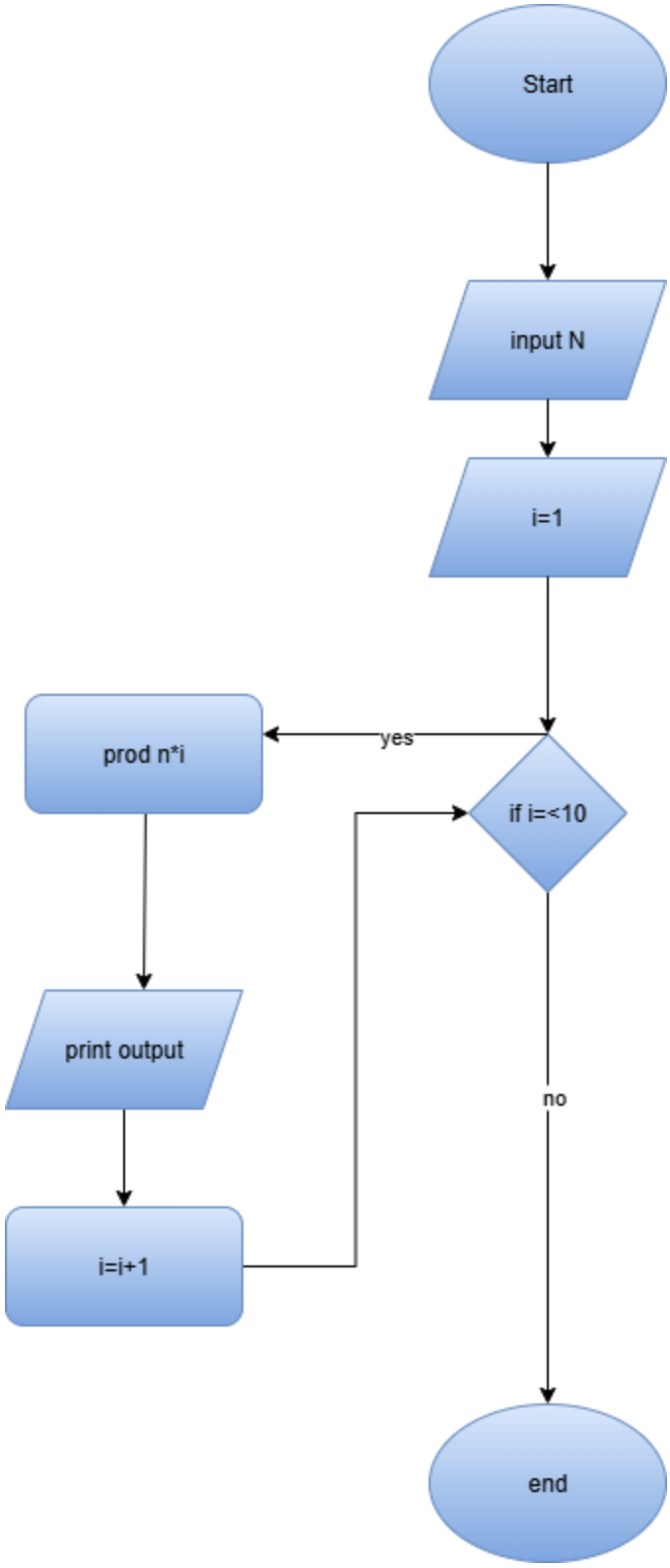
Algorithm:

1. Start
2. Read integer n
3. Set i = 1
4. While i <= 10 do:

    Print n * i

    Increment i

5.end


Start
input N
i=1
yes
prod n*i
if i=<10
print output
no
i=i+1
end

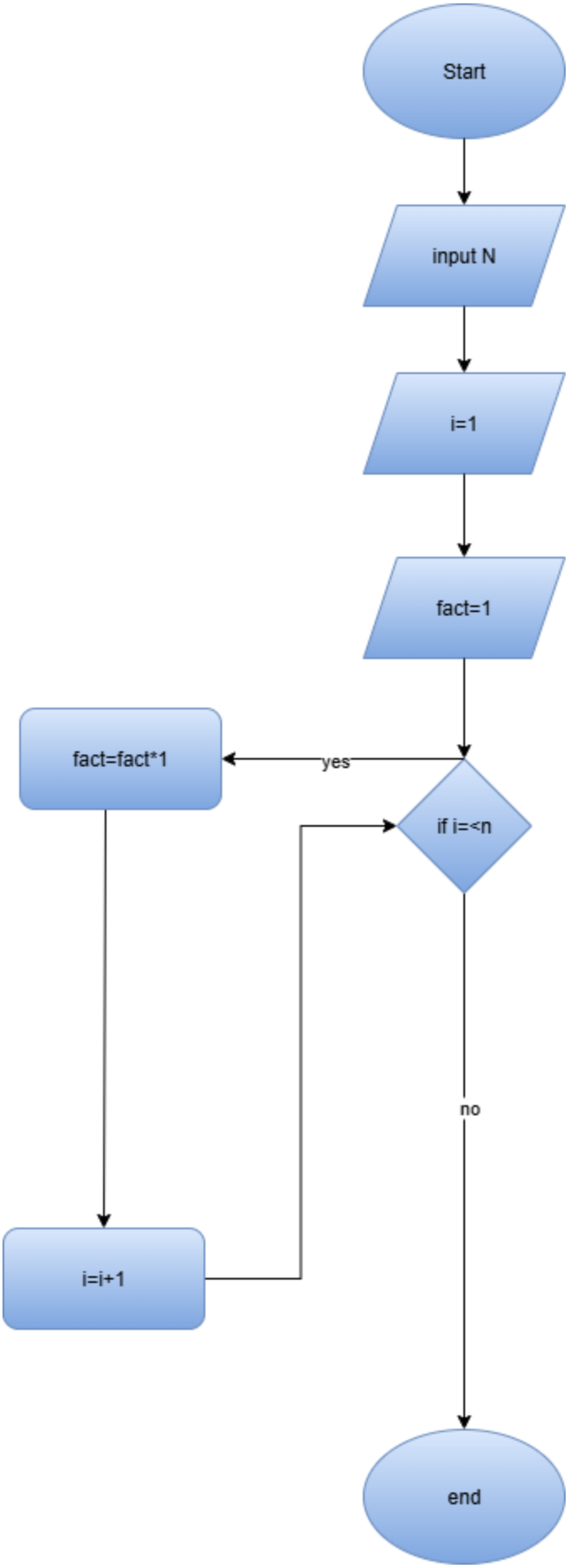
Q9 - Factorial of a Number

Algorithm:

1. Start
2. Read integer n
3. Set fact = 1, i = 1
4. While i <= n do:

    fact = fact * i

    Increment i
5. Print fact
6. End


Start
input N
i=1
fact=1
fact=fact*1
yes
if i=<n
no
i=i+1
end

Q10 - Simple Calculator using Switch

Algorithm:

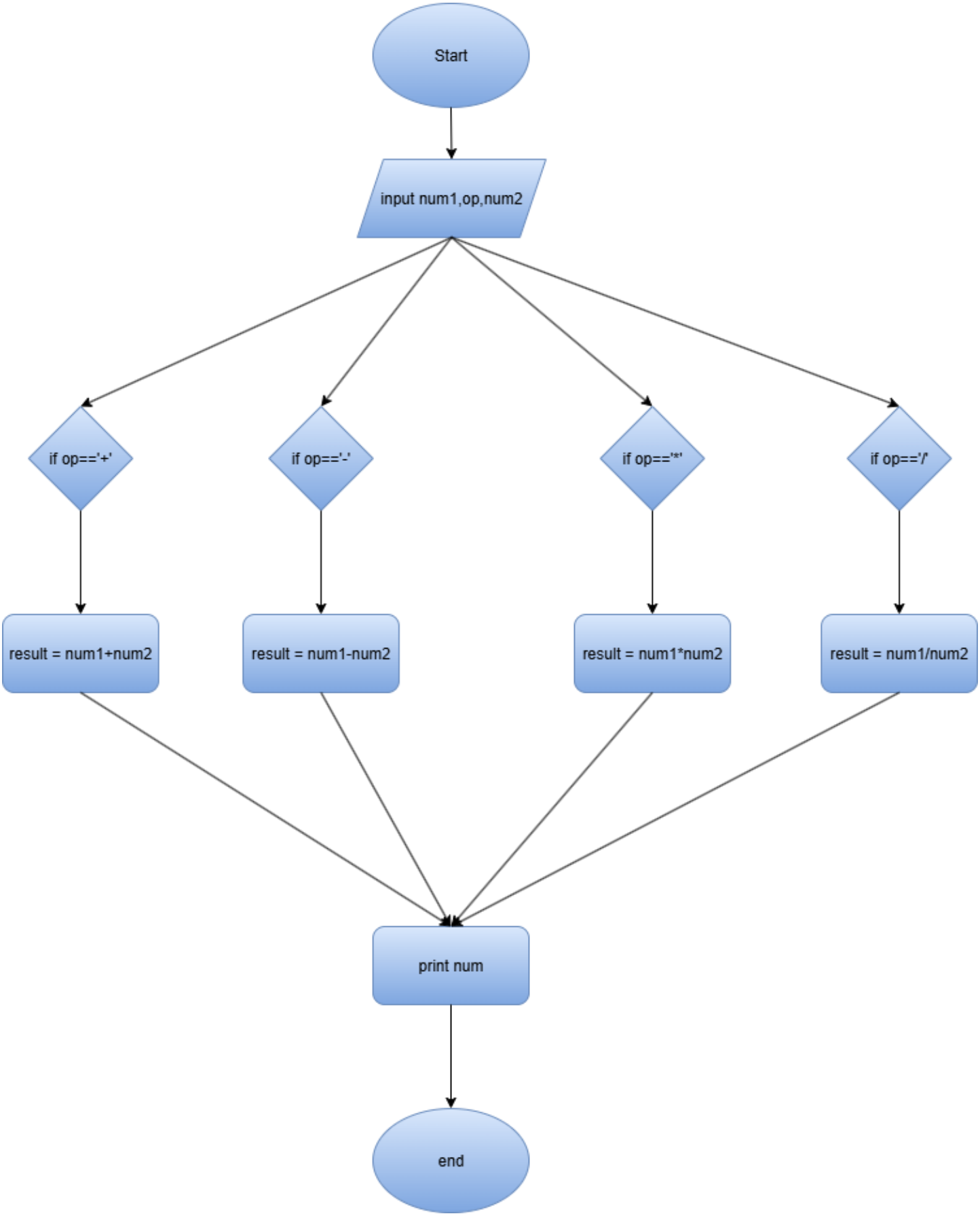
1. Start
2. Read two numbers a and b
3. Read an operator op (+, -, *, /)
4. Use switch statement:

    If op is +, print a + b

    If op is -, print a - b

    If op is *, print a * b

    If op is /, check if b != 0, then print a / b, else print error
5. End


Start
input num1,op,num2
if op=='+'
if op=='-'
if op=='*'
if op=='/'
result = num1+num2
result = num1-num2
result = num1*num2
result = num1/num2
print num
end

Q11 - FizzBuzz (1 to 100)

Algorithm:

1. Start
2. Set i = 1
3. While i <= 100 do:

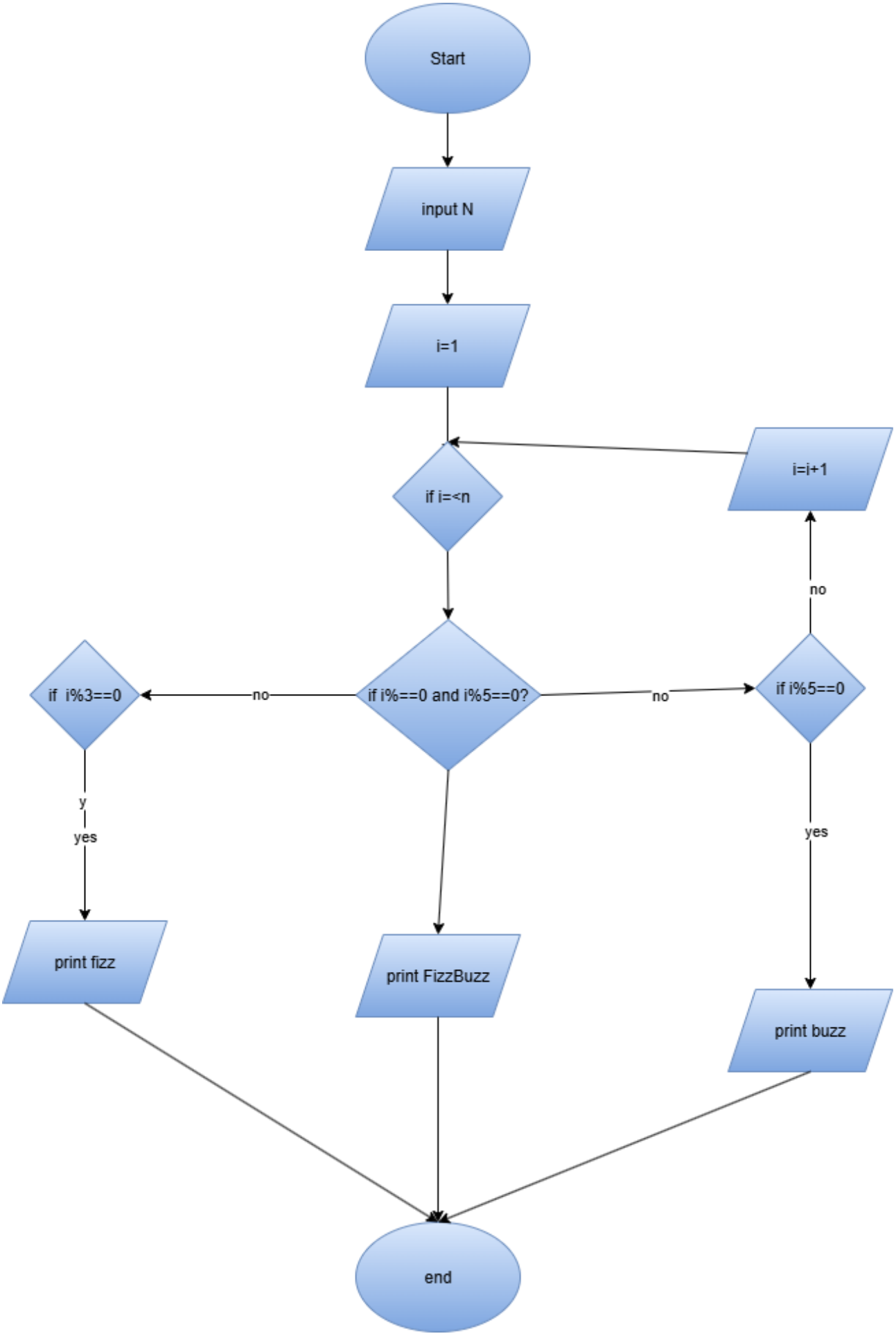
    If i % 3 == 0 and i % 5 == 0 → Print “FizzBuzz”

    Else if i % 3 == 0 → Print “Fizz”

    Else if i % 5 == 0 → Print “Buzz”

    Else → Print i

    Increment i
4. End


Start
input N
i=1
if i=<n
i=i+1
no
if i%==0 and i%5==0?
no
if i%5==0
no
if i%3==0
y
yes
print fizz
print FizzBuzz
yes
print buzz
end

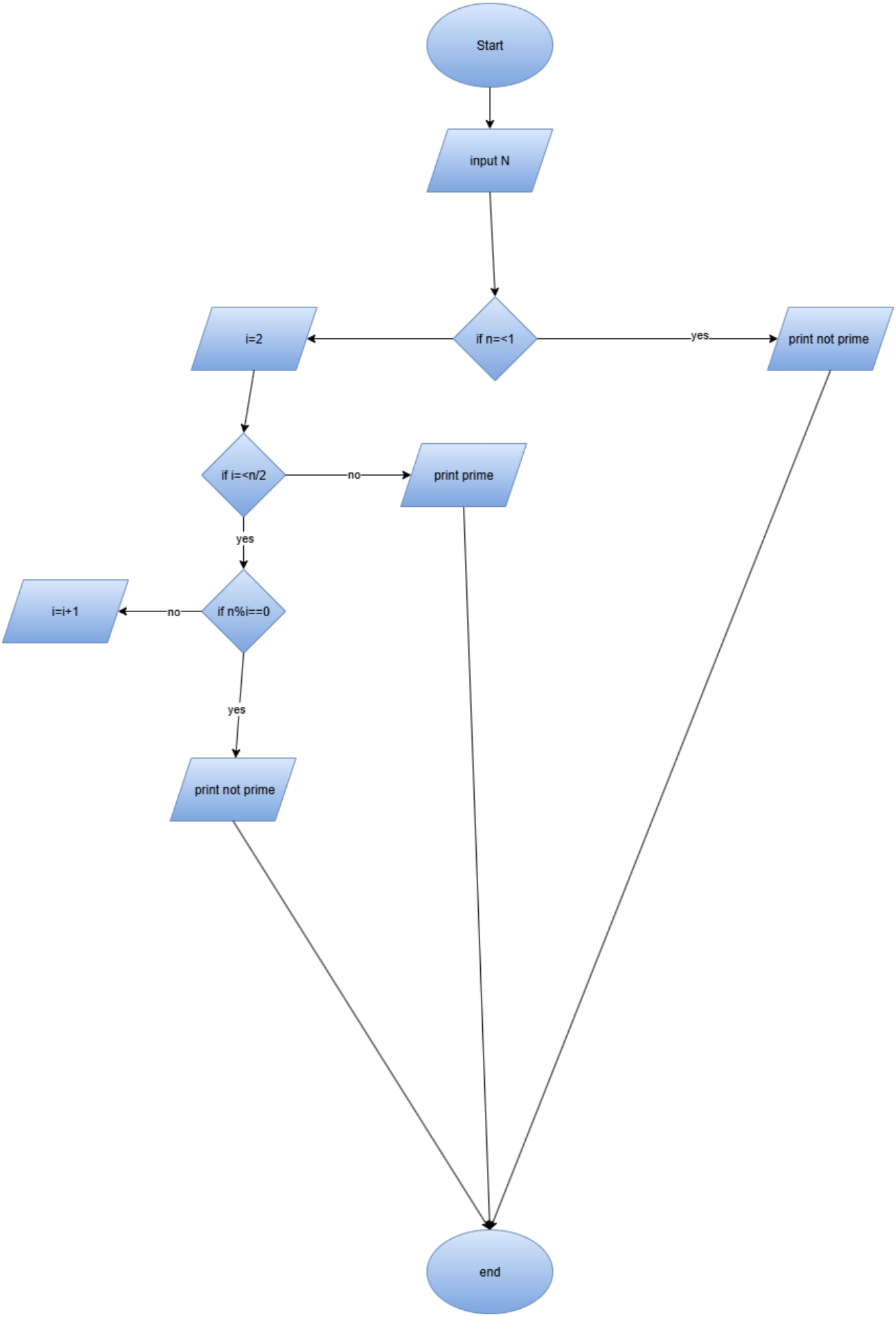
Q12 - Check Prime Number

Algorithm:

1. Start
2. Read integer n
3. If n <= 1 → Print “Not Prime”, End
4. Set isPrime = true
5. For i = 2 to sqrt(n):

   If n % i == 0, set isPrime = false
6. If isPrime == true → Print “Prime”

   Else → Print “Not Prime”
7. End


Start
input N
if n=<1
yes
print not prime
i=2
if i=<n/2
no
print prime
yes
if n%i==0
no
i=i+1
yes
print not prime
end