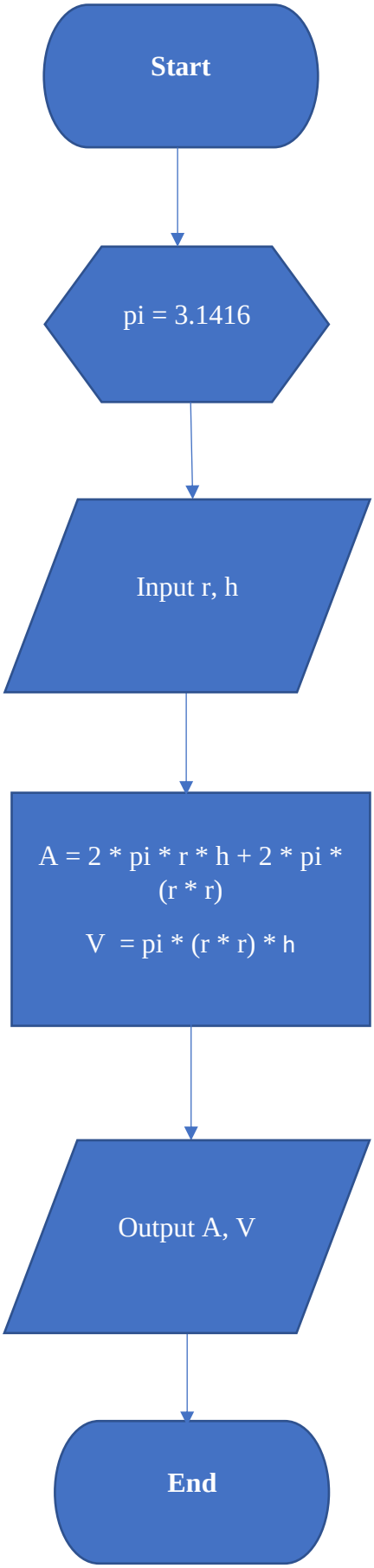
Sequential Flowchart:



Sequential Pseudocode:

Variables used:

r, h, pi, A, V are numeric.

Begin:

Initialization:

pi = 3.1416

Input:

Display “Enter radius:”

accept r

Display “Enter height:”

accept h

Process:

A = 2 * pi * r * h + 2 * pi * (r * r)

V = pi * (r * r) * h

Output:

Display “Surface Area =”, A

Display “Volume =”, V

End.

Sample Output:

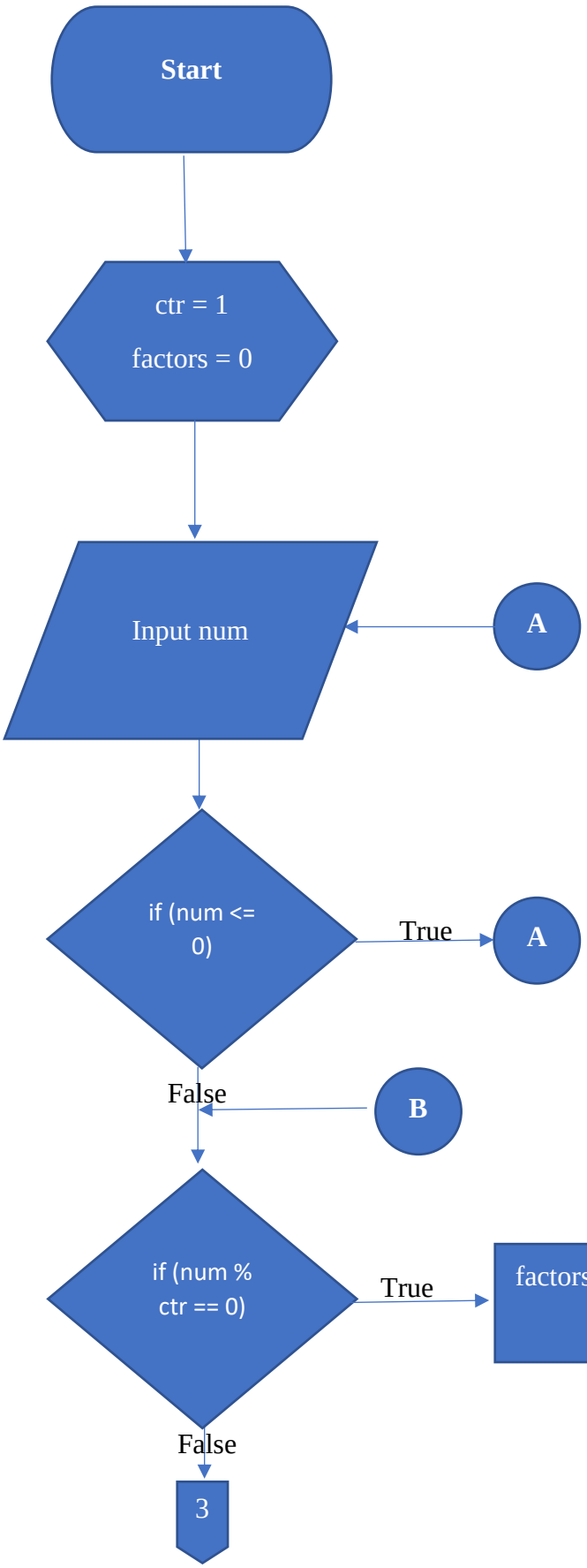
Enter radius: 10

Enter height: 25

Surface Area = 2199

Volume = 7854

Combination Flowchart:



Combination Pseudocode:

Variables used:

num, ctr, factors are numeric.

Begin:

Initialization:

ctr = 1

factors = 0

Input:

Display “INPUT A NUMBER:”

accept num

Process:

while (num <= 0) do

begin

Display “INVALID INPUT! TRY AGAIN.”

accept num

end

while (ctr <= num) do

begin

if (num % ctr == 0) then

begin

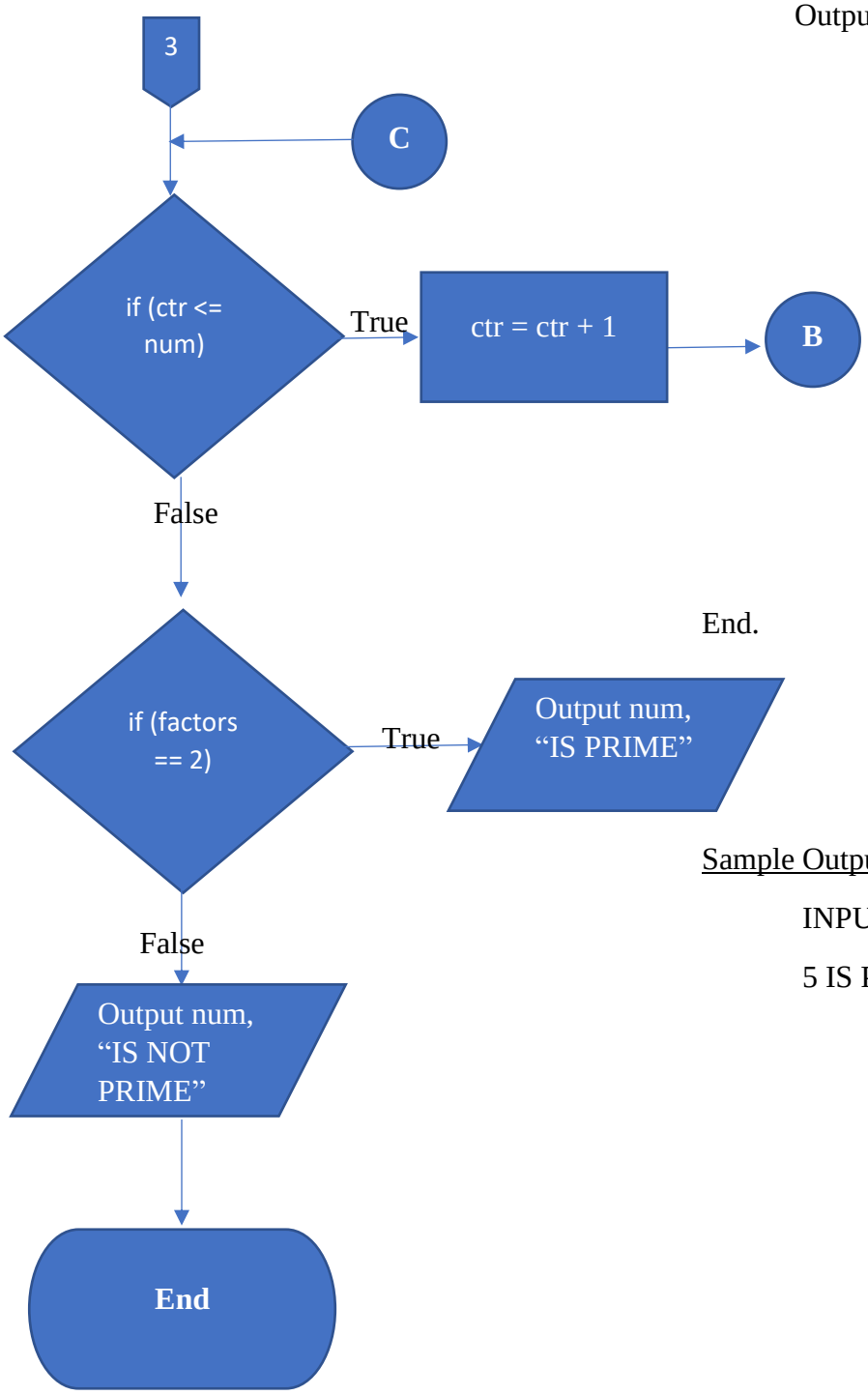
factors = factors + 1

end

ctr = ctr + 1

end

Combination Flowchart (continued):



Combination Pseudocode (continued):

Output:

```
        if  (factors == 2) then
        begin
                display num, "IS PRIME"
        end.
        else
        begin
                display num, "IS NOT PRIME!"
        end.
End.
```

Sample Output:

INPUT A NUMBER: 5

5 IS PRIME