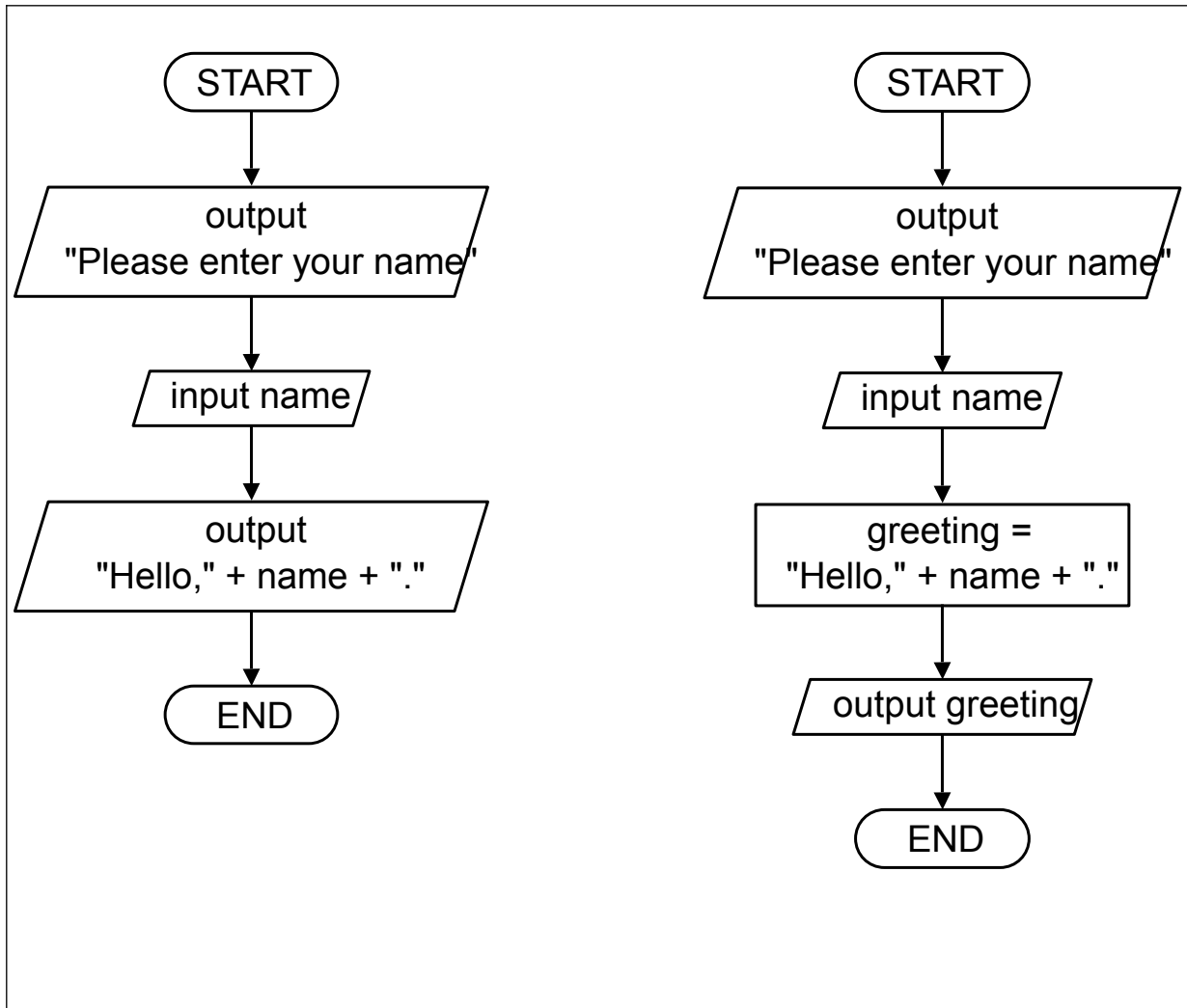


**Worksheet: Algorithms and Flowcharts**

- 1a. Draw a **flowchart** that represents an algorithm that prompts a user to input their name, then greets them with a hello message including their name.



- 1b. Write the **pseudocode** for the flowchart above.

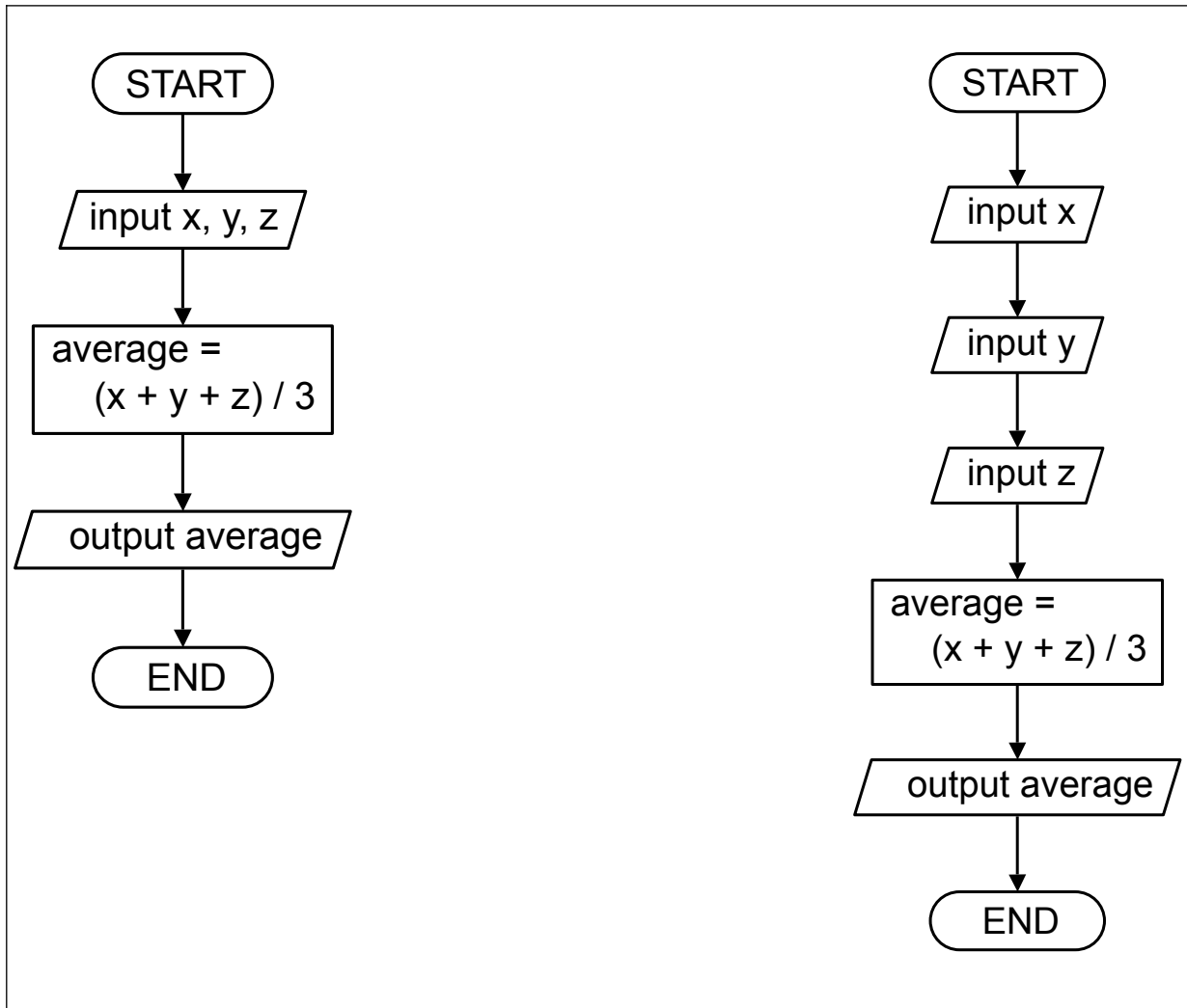
```

SEND 'Please enter your name' TO DISPLAY
RECEIVE name FROM KEYBOARD
SEND 'Hello,' + name + '.' TO DISPLAY

SEND 'Please enter your name' TO DISPLAY
RECEIVE name FROM KEYBOARD
SET greeting TO 'Hello,' + name + '.'
SEND greeting TO DISPLAY
  
```

**Worksheet: Algorithms and Flowcharts**

- 2a. Draw a **flowchart** that represents an algorithm that takes three numbers as inputs (call them x, y, and z), and outputs the average of those three numbers.



- 2b. Write the **pseudocode** for the flowchart above.

```

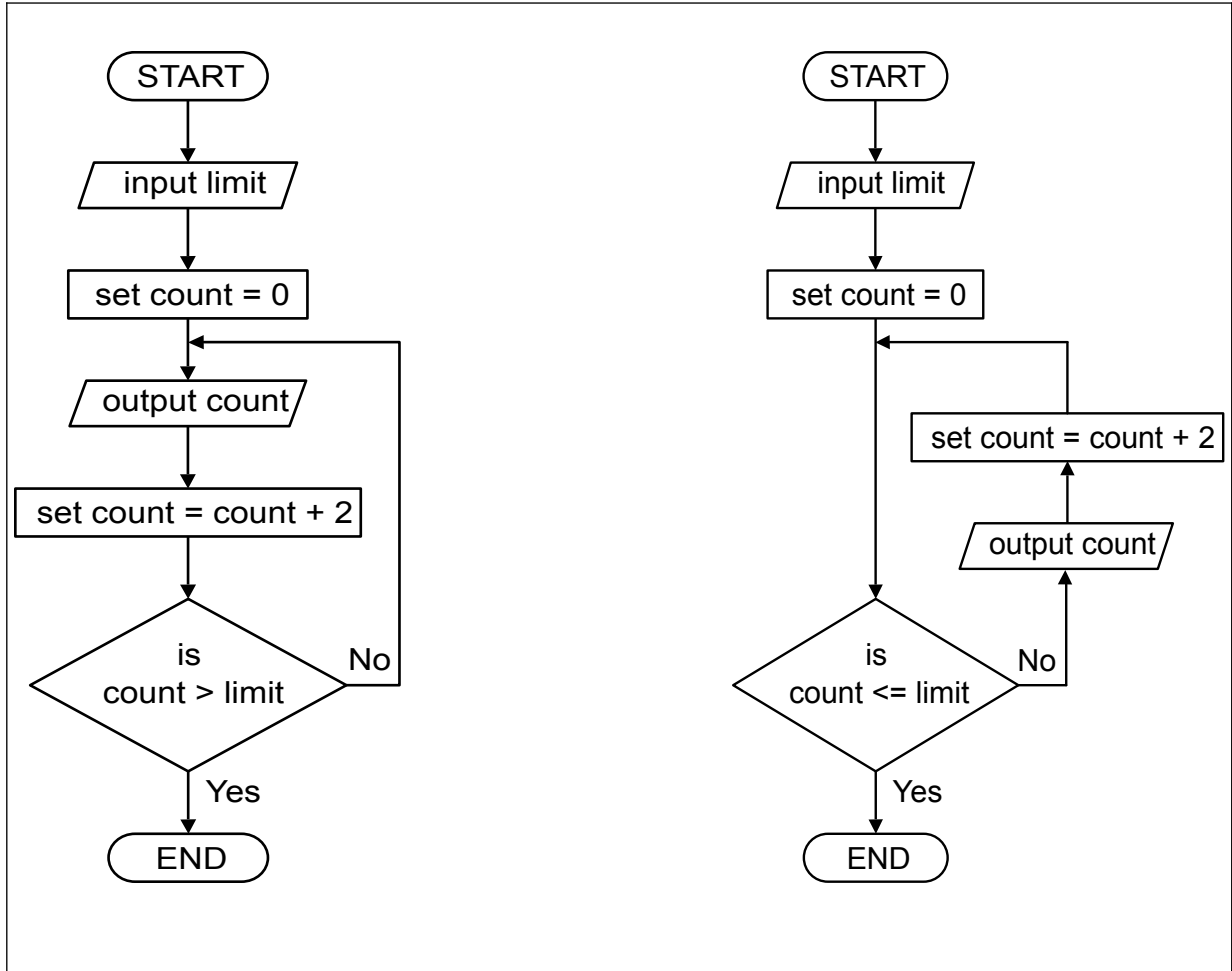
RECEIVE x, y, z FROM KEYBOARD
SET average TO (x+y+z)/3
SEND average TO DISPLAY
  
```

```

RECEIVE x FROM KEYBOARD
RECEIVE y FROM KEYBOARD
RECEIVE z FROM KEYBOARD
SET average TO (x+y+z)/3
SEND average TO DISPLAY
  
```

**Worksheet: Algorithms and Flowcharts**

3a. Draw a **flowchart** that represents an algorithm that inputs an integer (call it **limit**) and outputs all **even** numbers between zero and **limit**. (You can assume **limit** is a whole number).



3b. Write the **pseudocode** for the flowchart above.

```

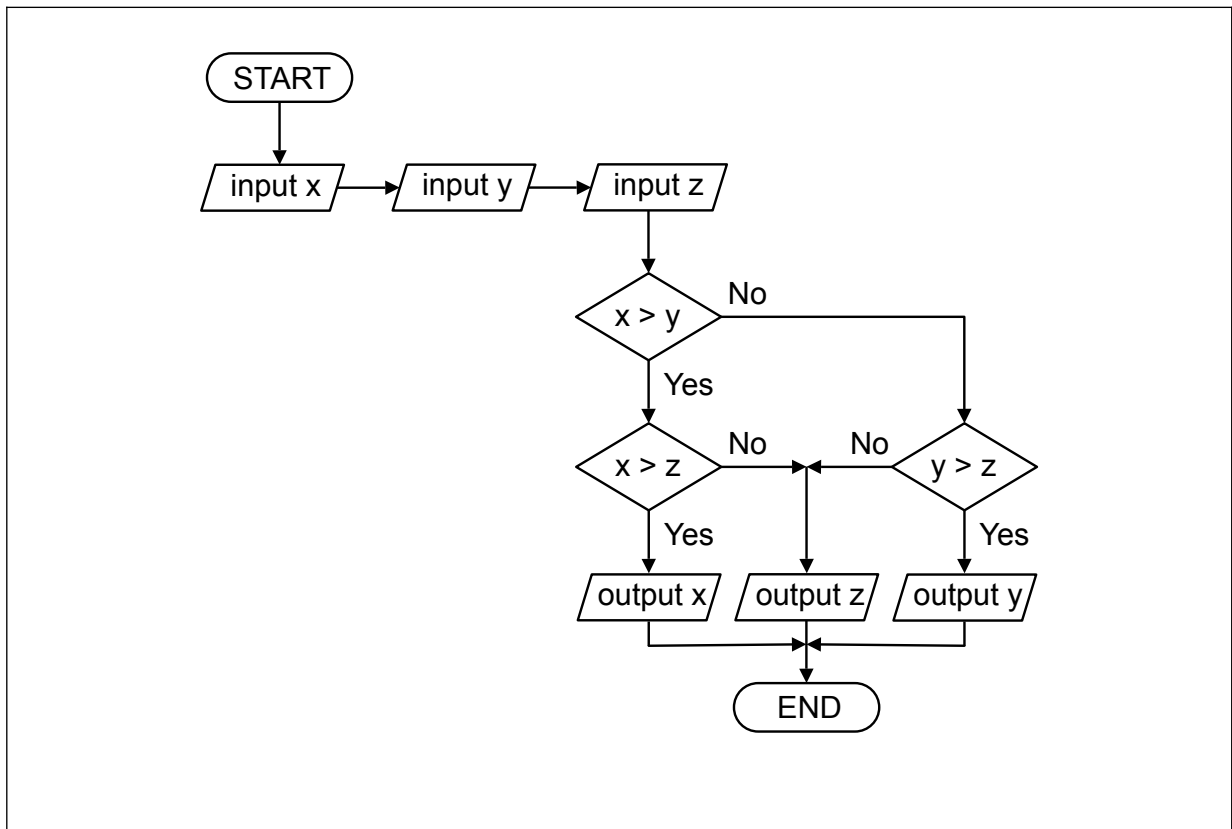
RECEIVE limit FROM KEYBOARD
SET count TO 0
REPEAT
    SEND count TO DISPLAY
    SET count TO count + 2
UNTIL count > limit
    
```

```

RECEIVE limit FROM KEYBOARD
SET count TO 0
WHILE count <= limit DO
    SEND count to DISPLAY
    SET count TO count + 2
END WHILE
    
```

**Worksheet: Algorithms and Flowcharts**

- 4a. Draw a flowchart that represents an algorithm that inputs three numbers (call them x, y, and z), and outputs the largest of those three numbers.



- 4b. Write the pseudocode for the flowchart above.

```

RECEIVE x FROM KEYBOARD
RECEIVE y FROM KEYBOARD
RECEIVE z FROM KEYBOARD
IF x>y THEN
    IF x>z THEN
        SEND x TO DISPLAY
    ELSE
        SEND z TO DISPLAY
    END IF
ELSE
    IF y>z
        SEND y TO DISPLAY
    ELSE
        SEND z TO DISPLAY
    END IF
END IF

```