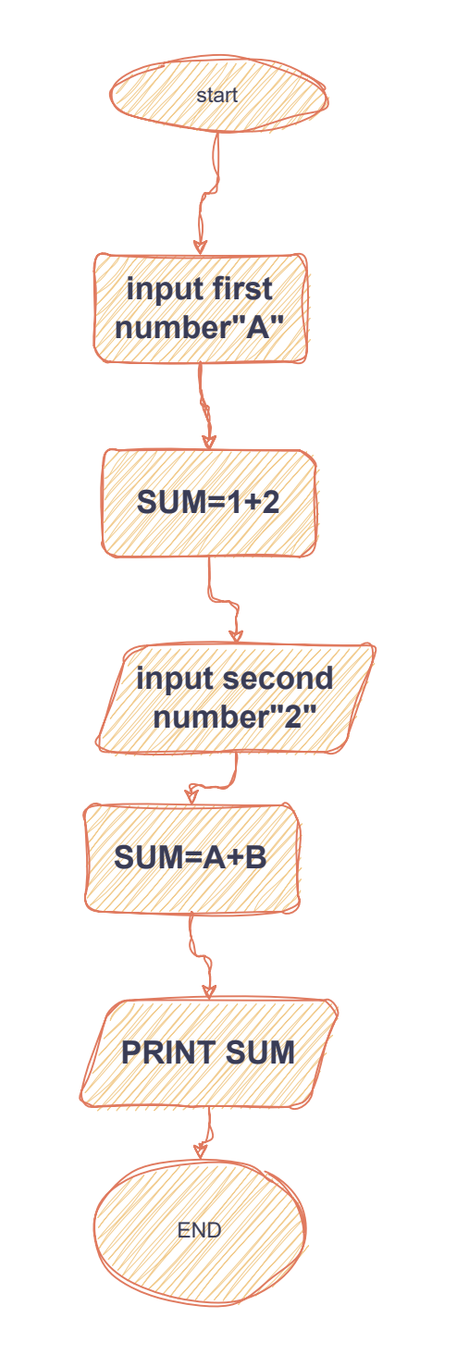
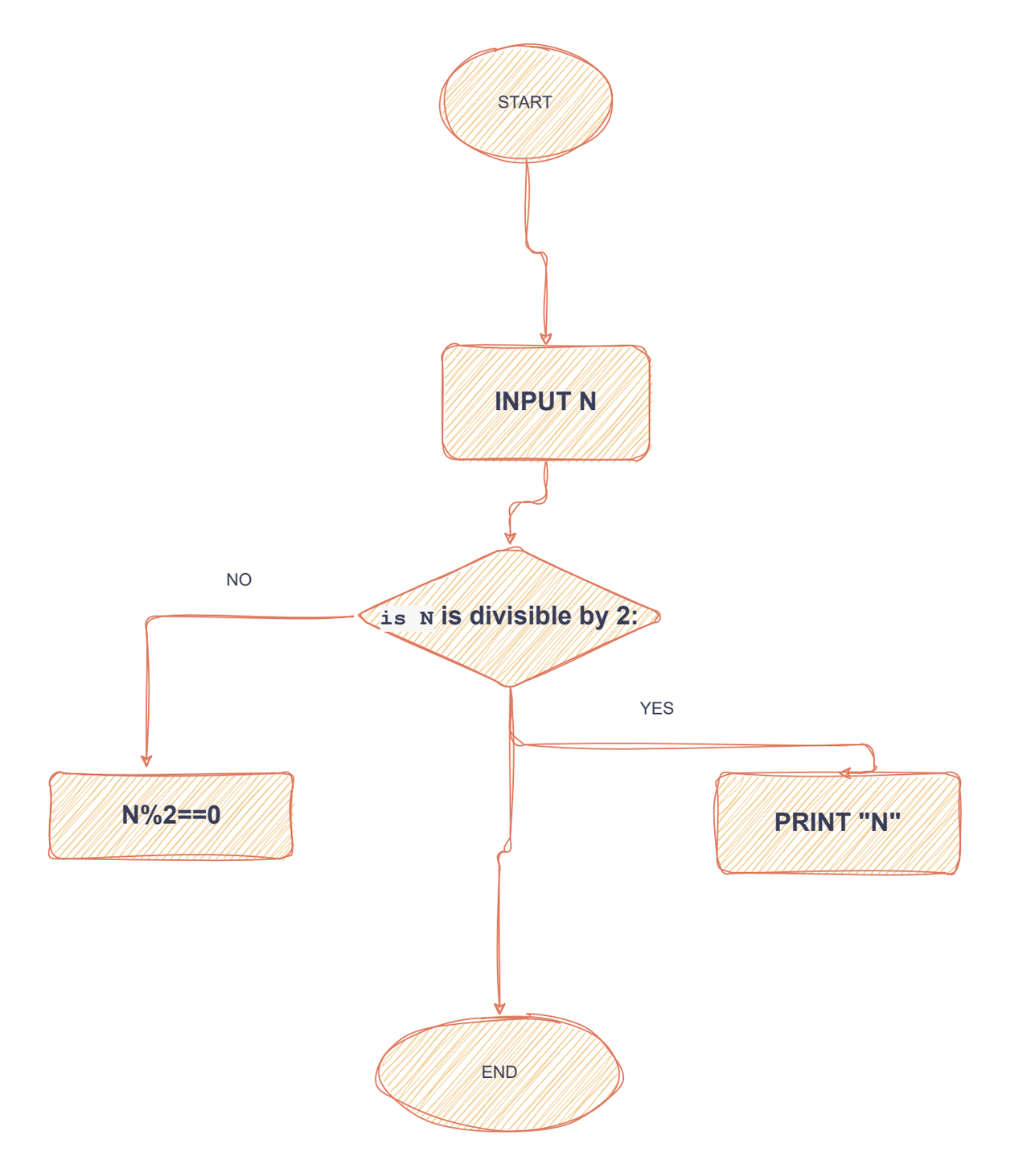
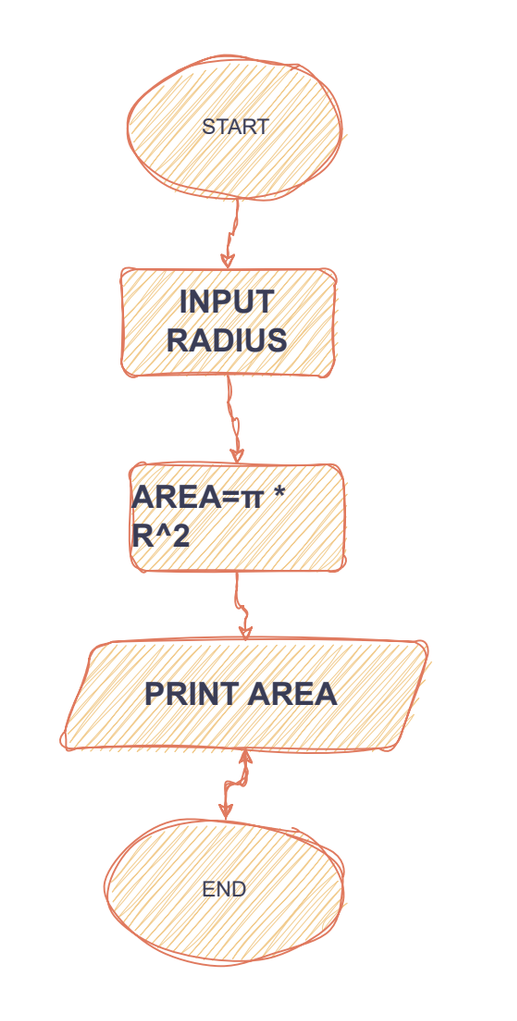
1- Draw a flowchart to add two numbers entered by user.



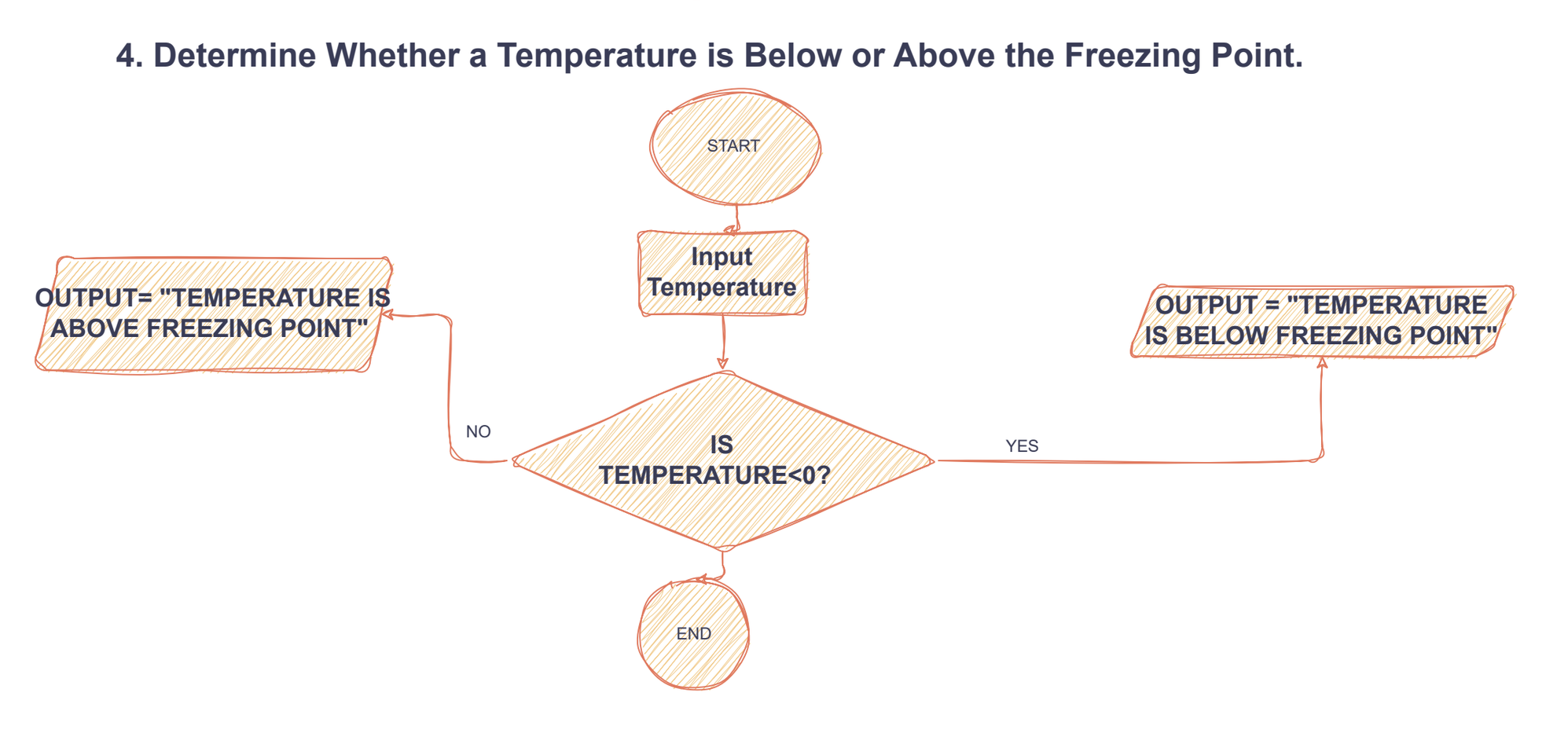
3.Determine and Output Whether Number N is Even or Odd.



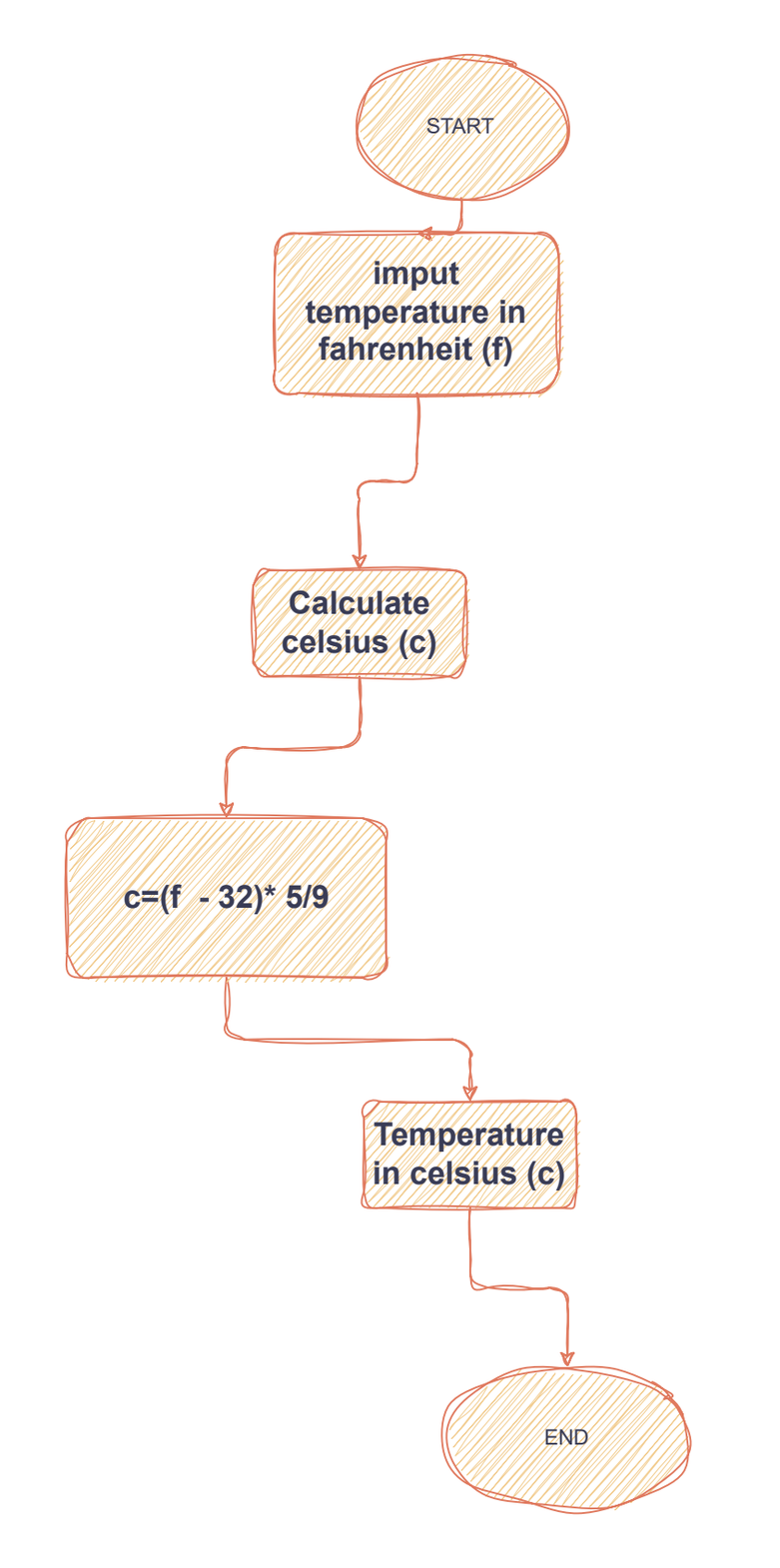
2- Calculate the area of a circle with given radius.



4. Determine Whether a Temperature is Below or Above the Freezing Point.



5. Convert Temperature from Fahrenheit (℉) to Celsius (℃).



6. Write an algorithm and draw a flowchart to convert the length in feet to centimeter

Algorithm:

Start.

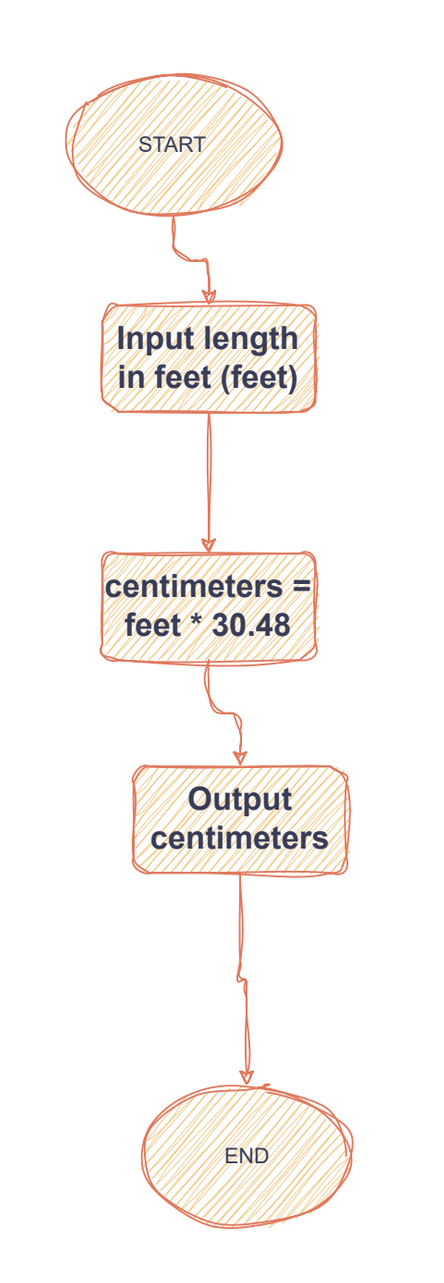
Input length in feet (let's call it `feet`).

Calculate `centimeters`

using the formula: `centimeters = feet * 30.48`.

Output the length in centimeters.

End.



Algorithm:

START

The beginning of the flowchart.

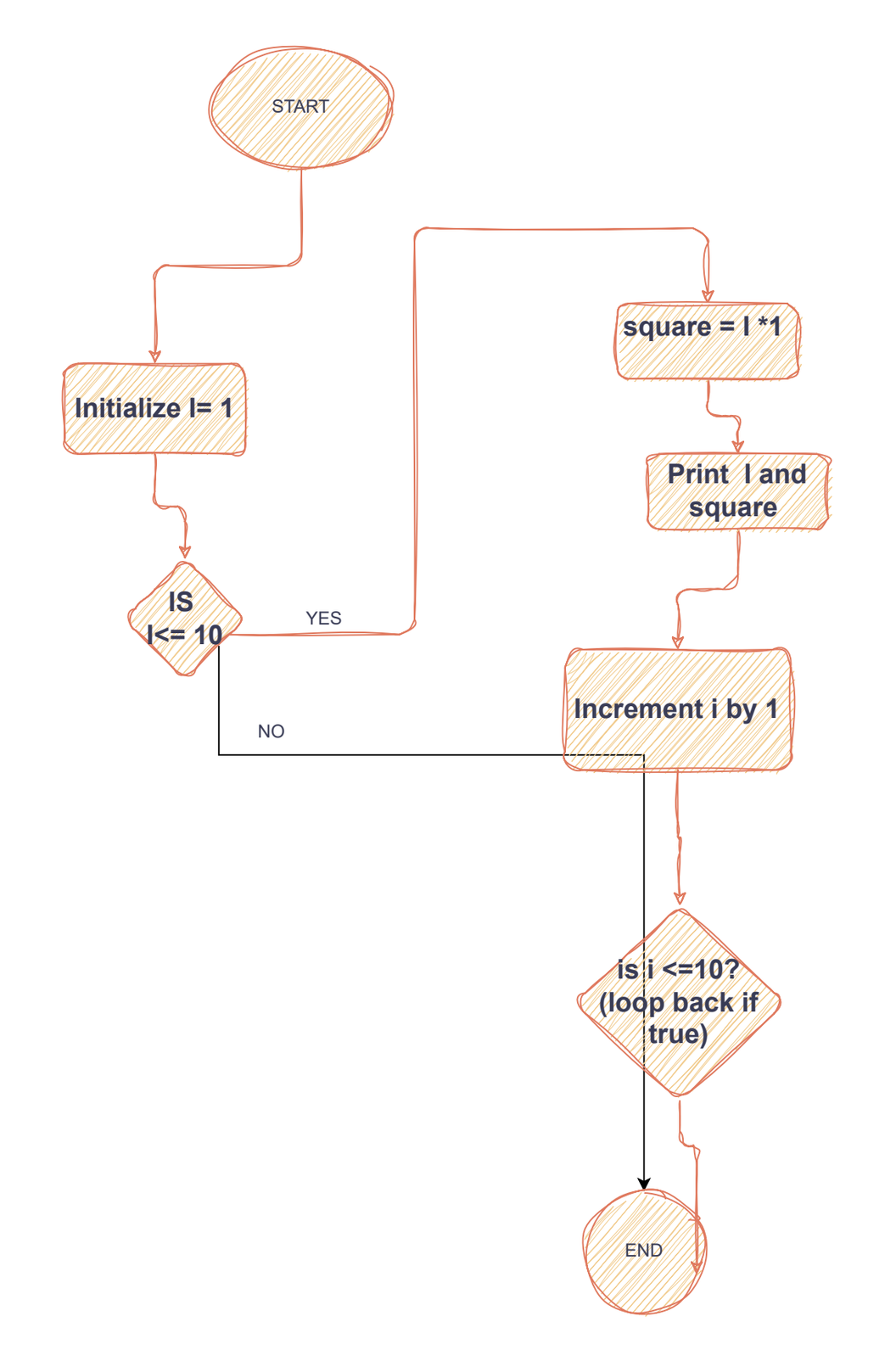
Input length in feet (feet)

centimeters = feet * 30.48

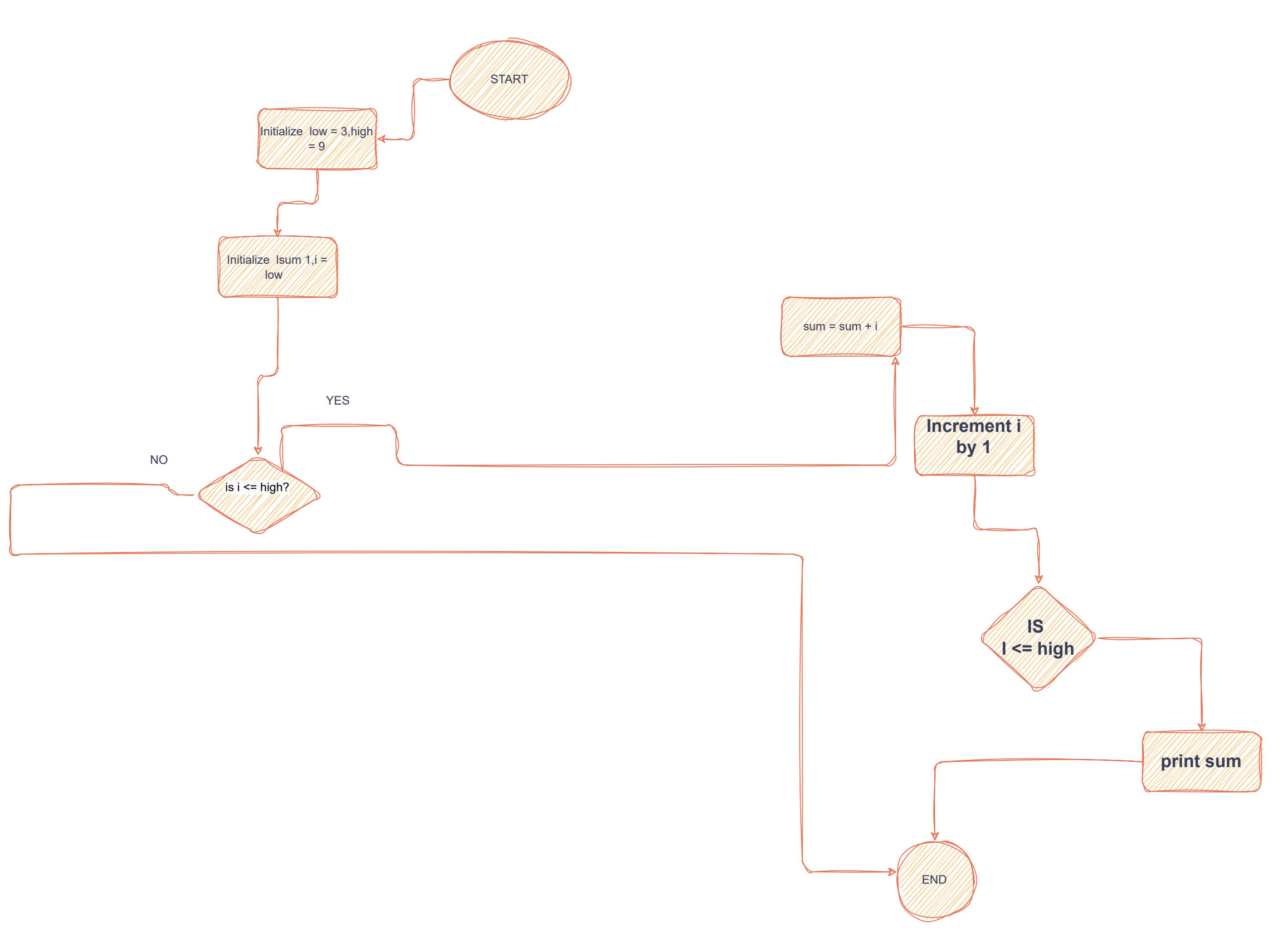
Output centimeters.

END:

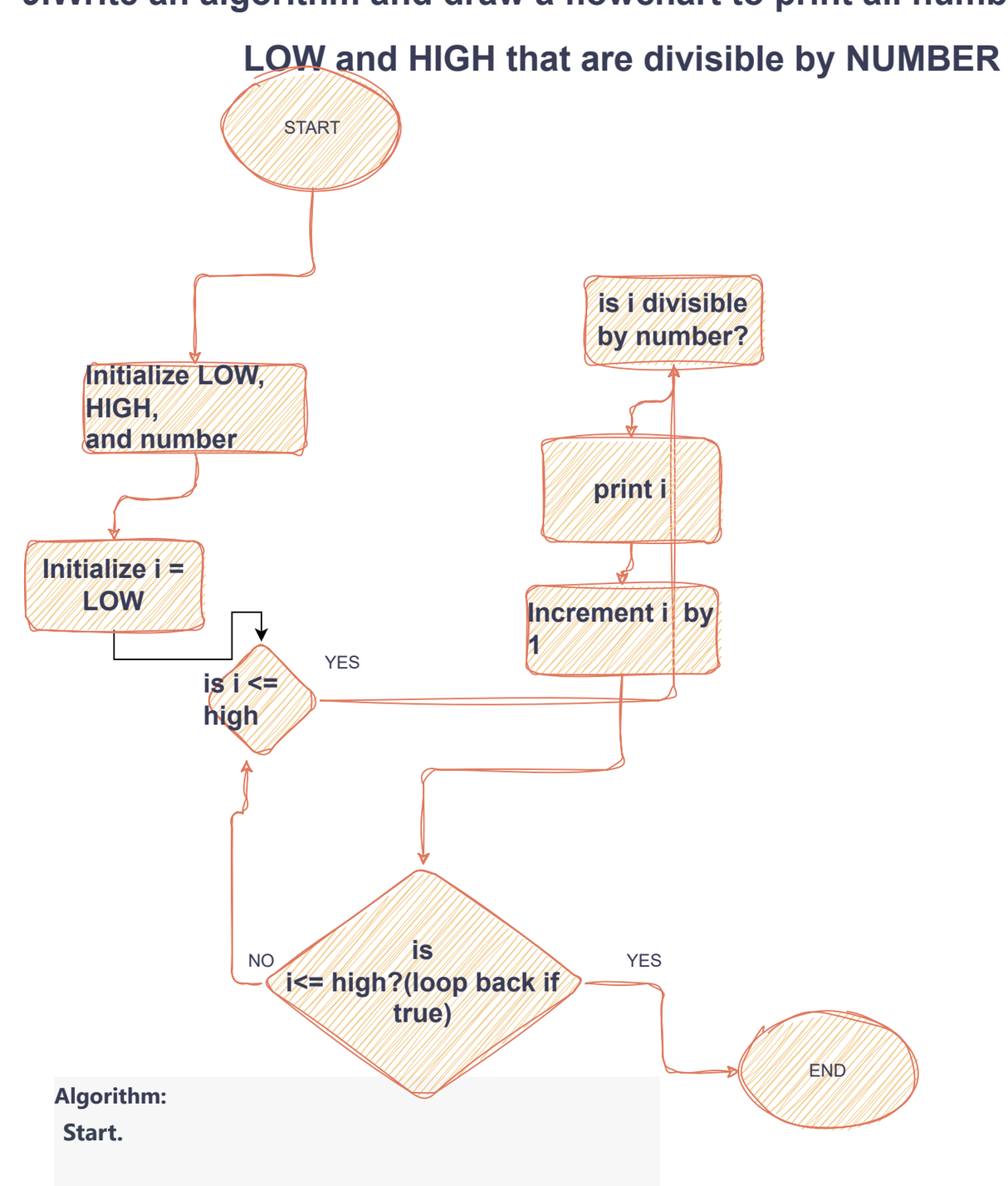
7. Write an algorithm and draw a flowchart to print the square of all numbers from 1 to10.



8.Write an algorithm and draw a flowchart to print the SUM of numbers from LOW to HIGH. Test with LOW=3 and HIGH=9.



9.Write an algorithm and draw a flowchart to print all numbers between LOW and HIGH that are divisible by NUMBER



Algorithm:

Start.

Initialize variables `LOW`, `HIGH`, and `NUMBER` .

Initialize a variable `i = LOW`.

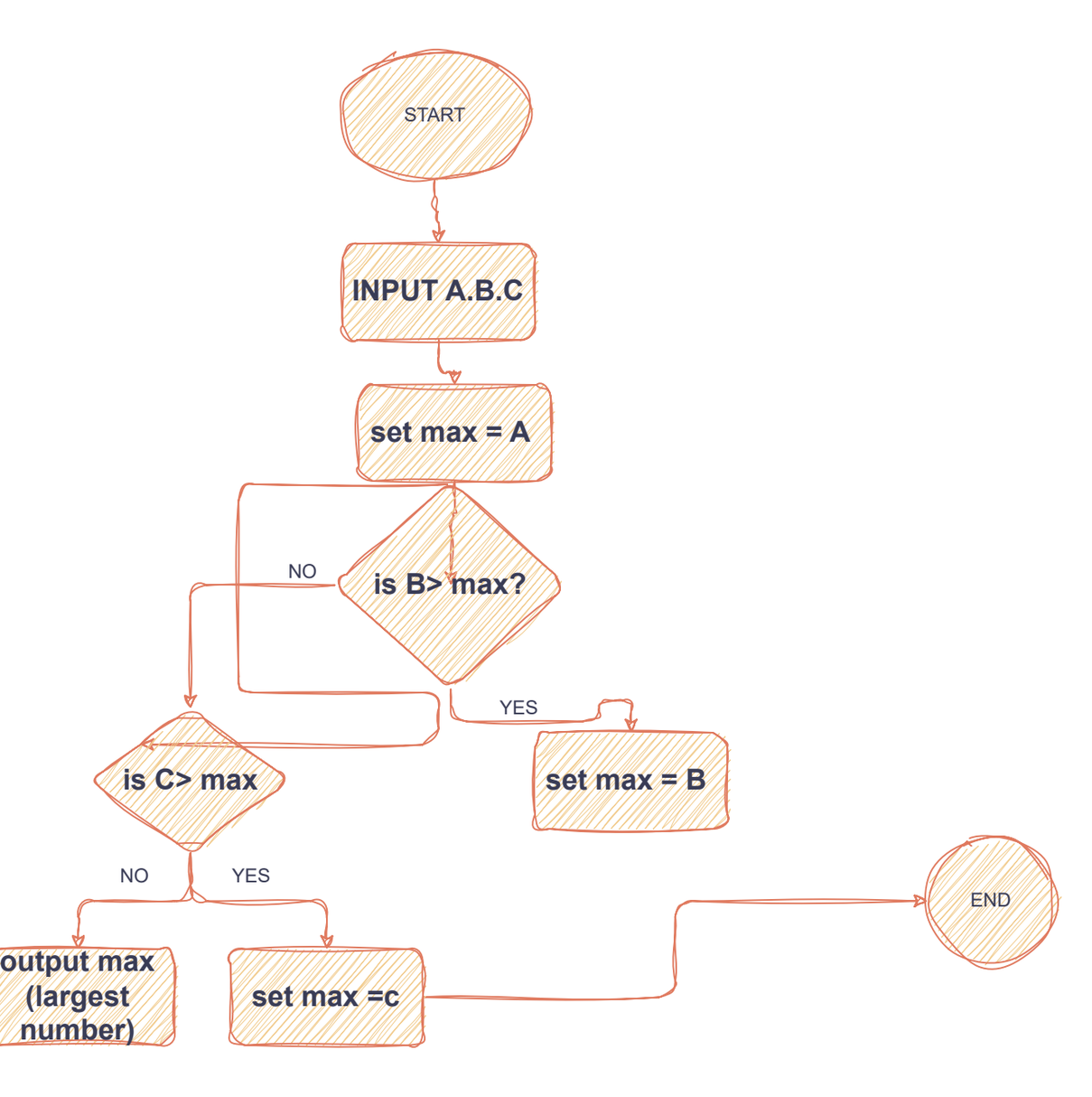
While `i` is less than or equal to `HIGH`, do the following:

If `i` is divisible by `NUMBER`, print `i`.

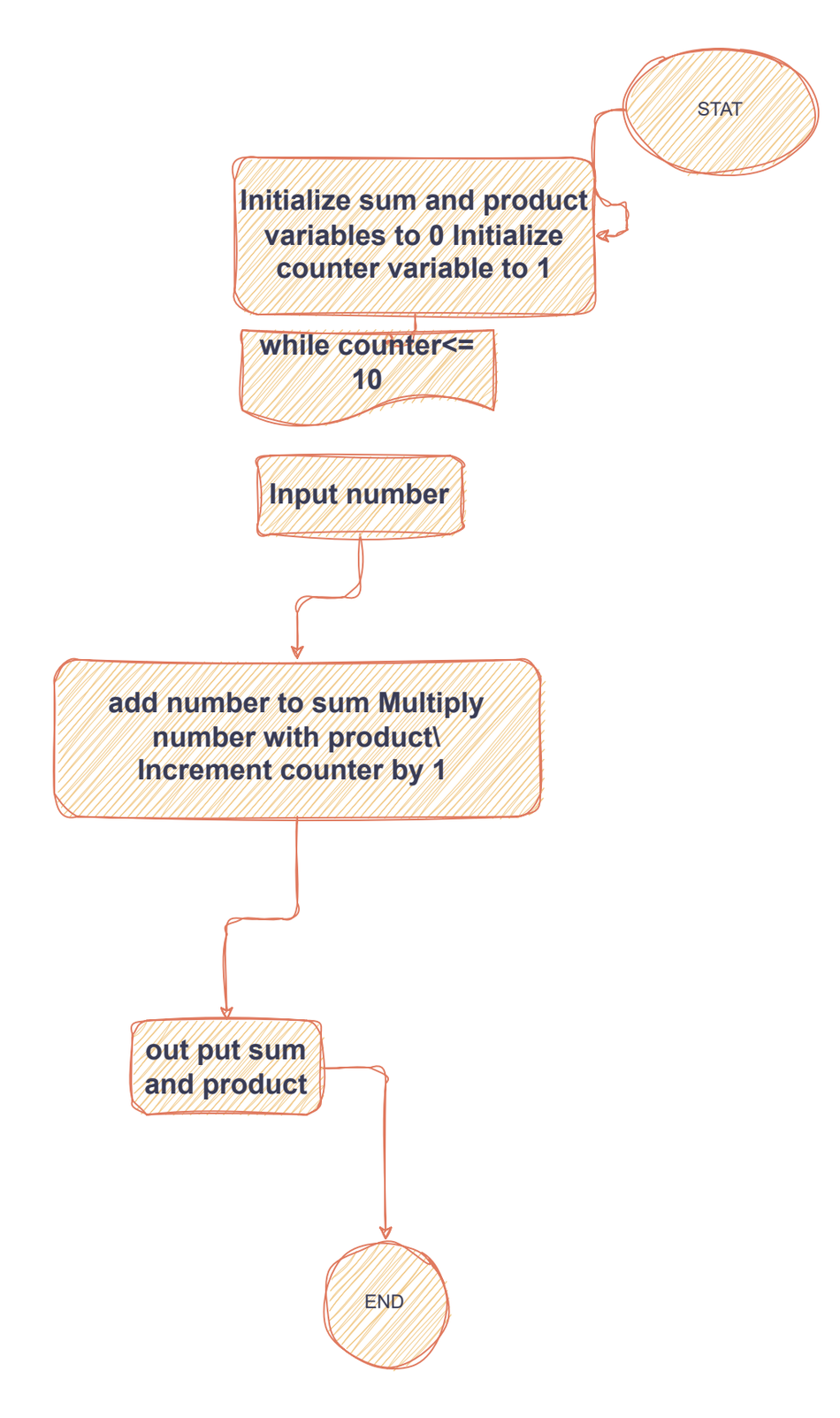
Increment `i` by 1.

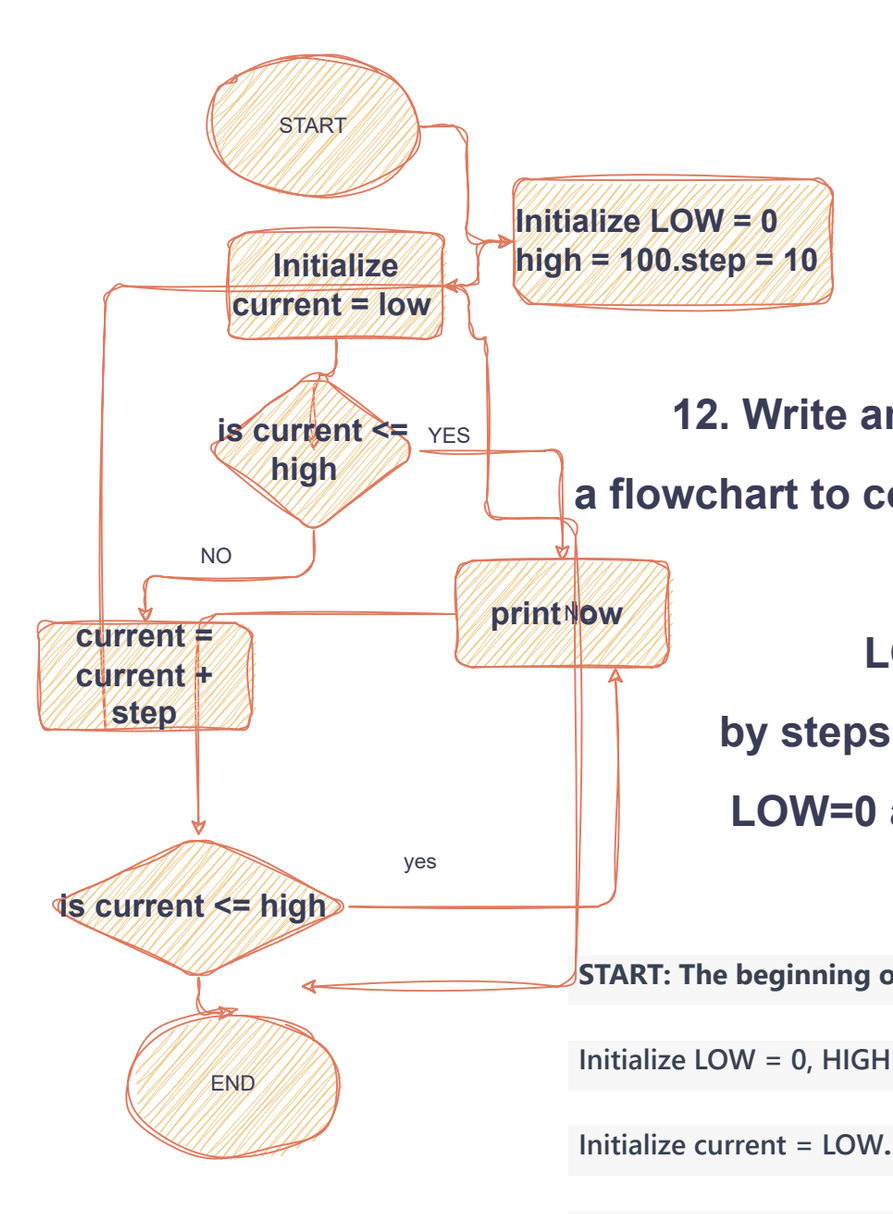
End.

10.Draw a flowchart to find the largest of three numbers A, B, and C.



11. Draw a flowchart for a program that reads 10 numbers from the user and prints out their sum, and their product





12. Write an algorithm and draw a flowchart to count and print all numbers from LOW to HIGH by steps of STEP. Test with LOW=0 and HIGH=100 and

START: The beginning of the flowchart.

Initialize LOW = 0, HIGH = 100, STEP = 10.

Initialize current = LOW.

Is current <= HIGH?

Yes: Proceed to the next steps.
No: End the loop and go to the next step.

Print current: **Output the value of `current`.**

current = current + STEP

Is current <= HIGH?

Yes: Loop back to the printing step.
No: End the loop.

END

17. Design an algorithm with a natural number, n, as its input which calculates the following formula and writes the result in the standard output: S = ½ + ¼ + … +1/n.

Algorithm:

Start.

Input a natural number `n`.

Initialize `sum` to 0.

For each `i` from 2 to `n`, do the following:

Calculate `term` as `1/i`.

Add `term` to `sum`.

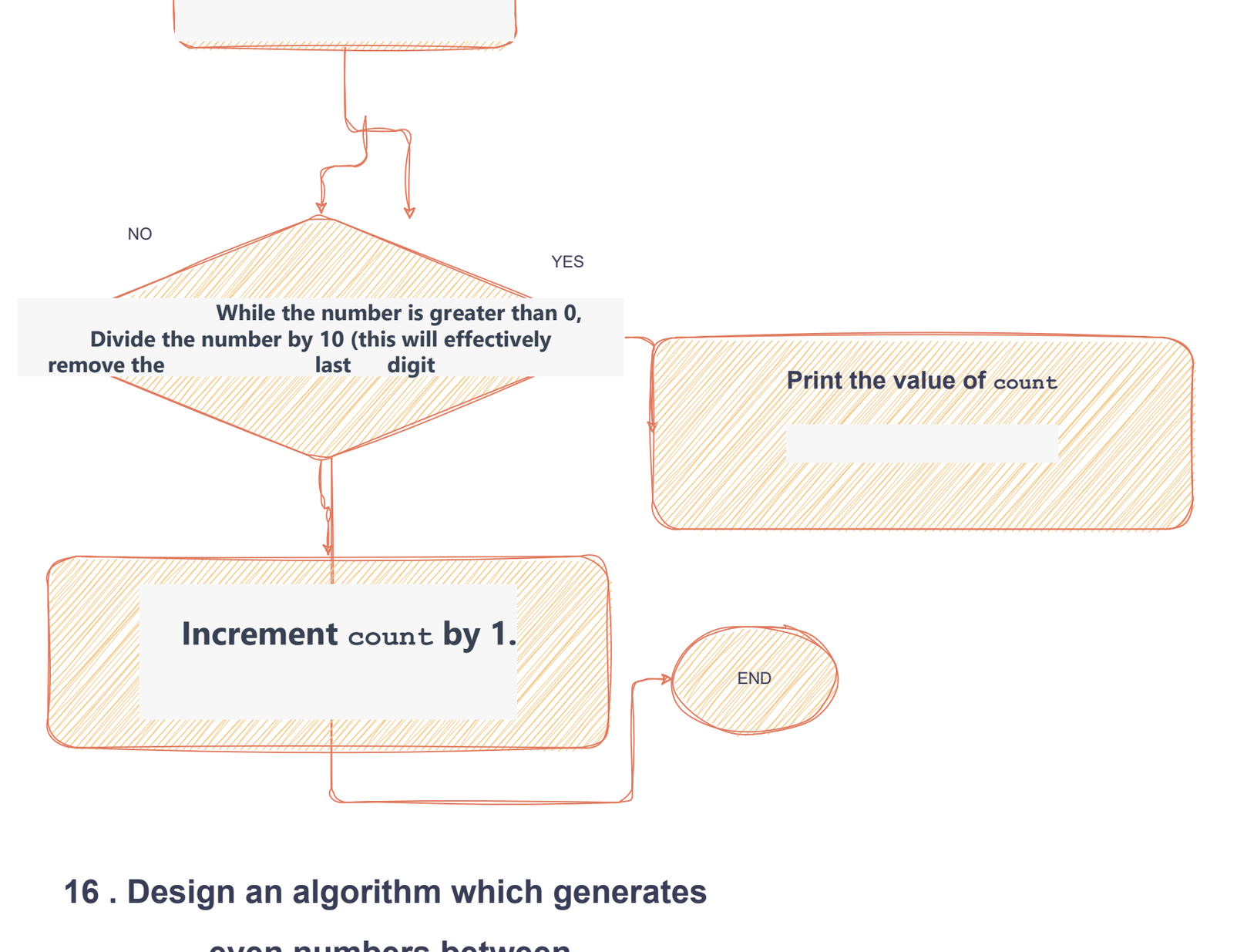
Print `sum`.

End

19. Draw a flow chart to print multiplication table of any number.

START: The beginning of the flowchart.
Input the number for which you want the multiplication table.
Initialize a variable `i` to 1.
While `i` is less than or equal to 10, d
Print the product.
Increment `i` by 1.
END

20. Draw a flow chart to count number of digits in a number.



16 . Design an algorithm which generates even numbers between 1000 and 2000 and then prints them in the standard output. It should also print total sum.

Algorithm:

Start.

Set `current_number` to 1000.

Set `total_sum` to 0.

While `current_number`
is less than or equal to 2000, do the following:

If `current_number` is even, print `current_number`.
Add `current_number` to `total_sum`.
Increment `current_number` by 2.

Print `total_sum`.

End.

18. Design an algorithm to convert a decimal number, n, to binary format?

Algorithm:

Start.

Input a decimal number `n`.

Initialize an empty string `binary`.

While `n` is greater than 0, do the following:

Calculate the remainder when `n` is divided by 2.
Append the remainder to the beginning of `binary`.
Divide `n` by 2 and update `n` with the quotient.

Print `binary`.

End.