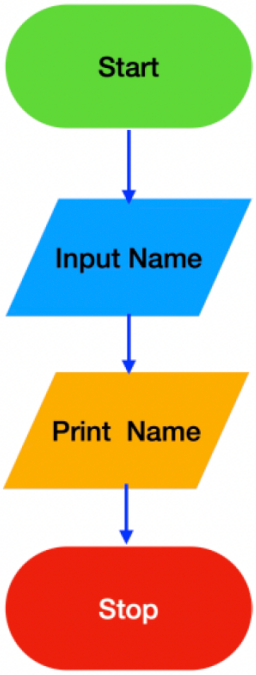
Program or Problem Solutions are normally represented in the form of Algorithm and Flow chart which can be used or implemented in any language.

1. Program should accept a name and print the name.

Algorithm:

Step 1: Start
Step 2: Input Name
Step 3: Print Name
Step 4: Stop

Flow Chart:



Code

```
name = input("Enter your name: ")
print(name)
```

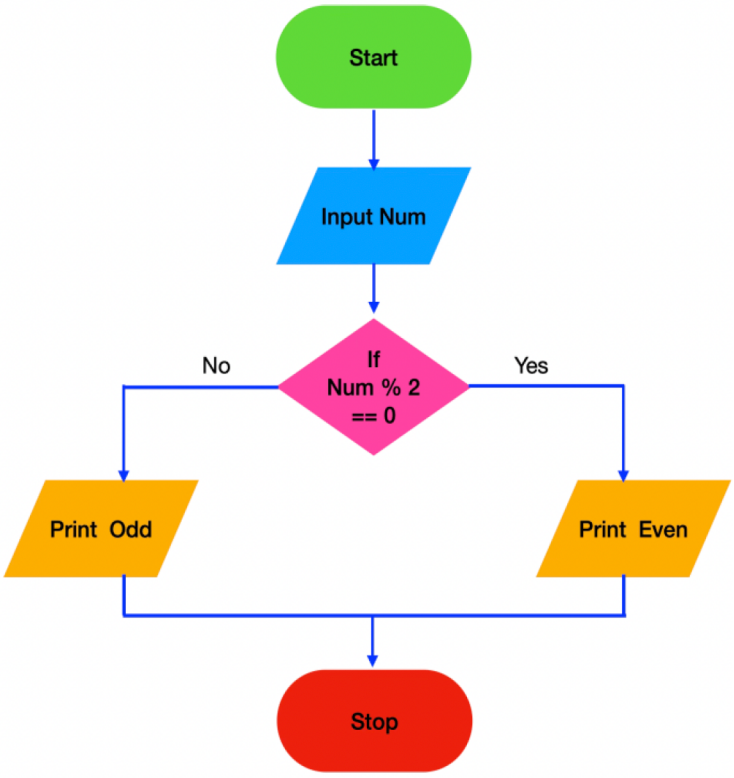
```
#modified program with greeting
name = input("Enter your name: ")
print("Hello", name)
```

2. Program shall accept a number and print, whether odd or even.

Algorithm:

Step 1: Start
Step 2: Declare Num
Step 3: Input Num
Step 4: If the Num divided by 2 gives remainder as zero, the number is even else Num is odd.
Step 5: Stop

Flow Chart:



Code

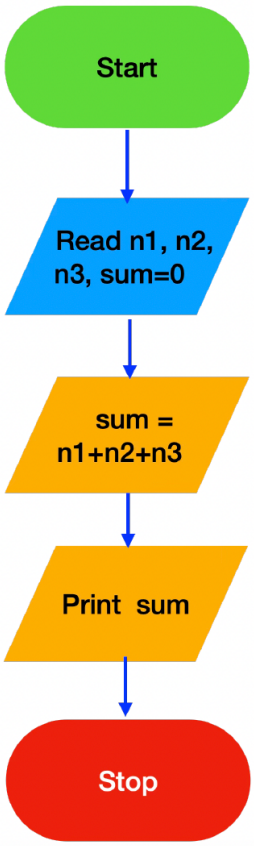
```
num = int(input("Enter number: "))

if num % 2 == 0:
    print("Even")
else:
    print("Odd")
```

3. Program shall accept three numbers and print the average of 3 numbers.

Algorithm:

Step 1: Start
Step 2: Declare n1, n2, n3 , sum = 0
Step 3: Read n1, n2, n3
Step 4: sum = m1 + n2 + n3
Step 5: print sum
Step 7: Stop

Flow Chart:



Code

```
# Input three numbers
a = float(input("Enter first number: "))
b = float(input("Enter second number: "))
c = float(input("Enter third number: "))

# Calculate average
average = (a + b + c) / 3

# Display result
print("Average =", average)
```

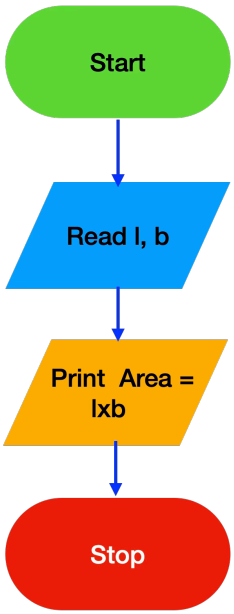
```
one can avoid assigning average can also print the result
directly.
# Input three numbers
a = float(input("Enter first number: "))
b = float(input("Enter second number: "))
c = float(input("Enter third number: "))

print("Average =", (a + b + c) / 3)
```

4. Program shall accept length and breadth and print the area of rectangle.

Algorithm:

Step 1: Start
Step 2: Input Name
Step 3: Print Name
Step 4: Stop

Flow Chart:



🐍 Code

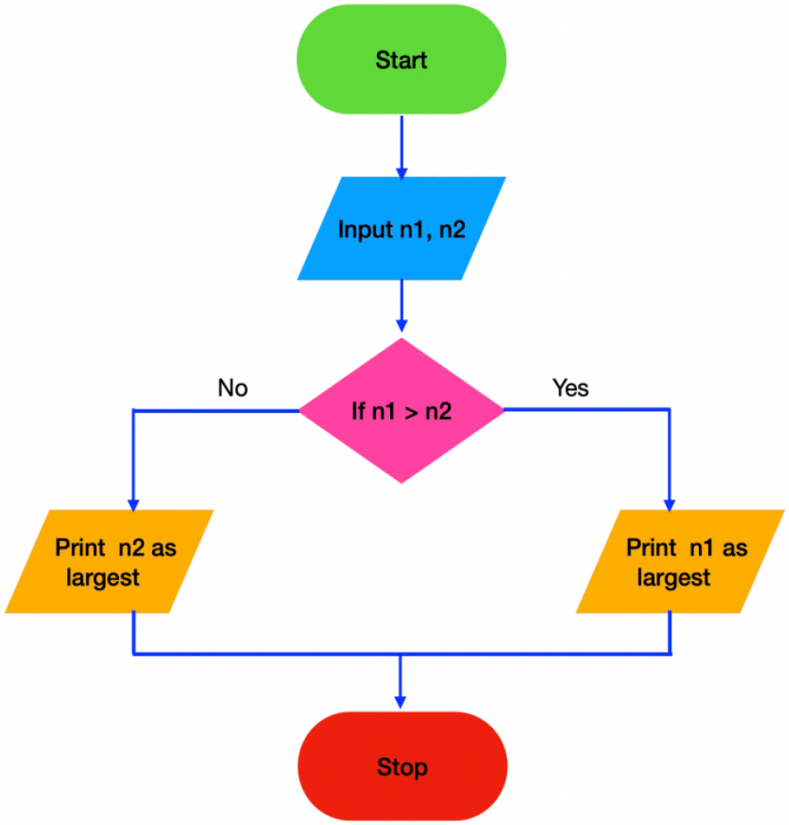
```
# Input length and breadth
l = float(input("Enter length: "))
b = float(input("Enter breadth: "))

# Display result
print("Area of rectangle =", l*b)
```

5. Program shall accept two numbers and print the largest of the numbers.

Algorithm:

Step 1: Start
Step 2: Declare and Read n1, n2
Step 3: if n1 is greater than n2, n1 as largest otherwise n2 as largest.
Step 4: Stop

Flow Chart:



Code

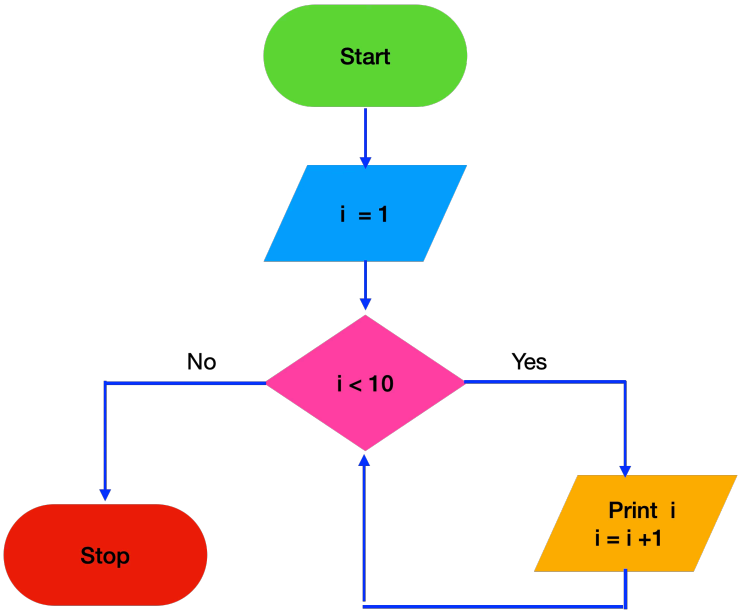
```
# Input two numbers
a = float(input("Enter first number: "))
b = float(input("Enter second number: "))

# Check and print largest
if a > b:
    print("Largest number =", a)
else:
    print("Largest number =", b)
```

6. Program shall print the numbers from 1 to 10.

Algorithm:

Step 1: Start
Step 2: Initialize i ← 1
Step 3: If i ≤ 10, go to Step 5; otherwise go to Step 6
Step 4: Print i, i ← i + 1, then go to Step 3
Step 5: Stop

Flow Chart:



Code

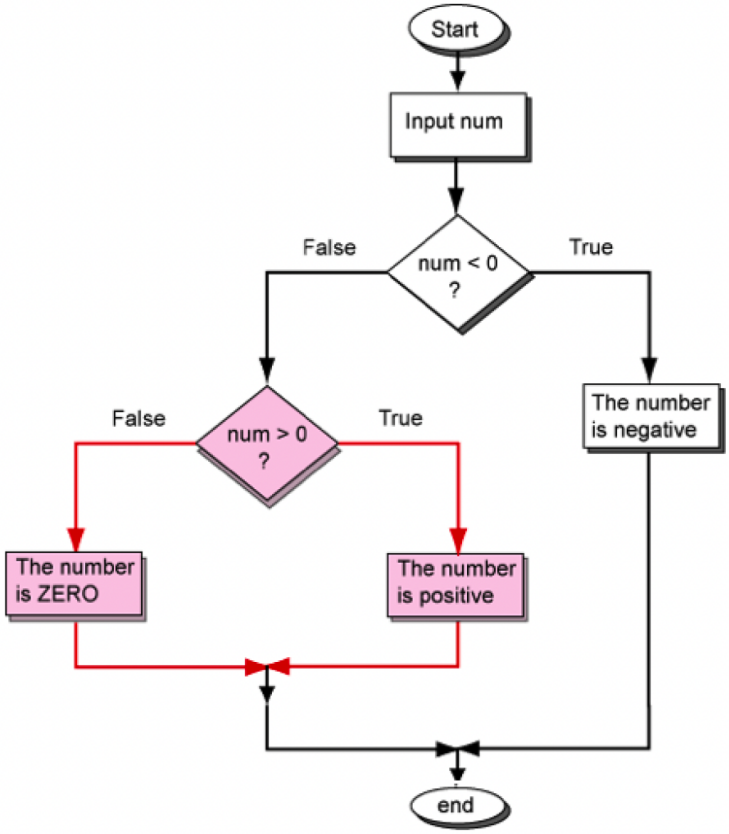
```
# Using for loop
for i in range(1, 11):
    print(i)
```

```
# using while loop
i = 1
while i <= 10:
    print(i)
    i += 1
```

7. Program shall accept a number and print whether the number is positive or negative.

Algorithm:
Step 1: Start
Step 2: Input num
Step 3: If num is less than Zero then print the number as negative
Step 4: Else if num is greater than zero then print the number as positive
Step 5: Else print the number is Zero
Step 6: Stop

Flow Chart:



Code

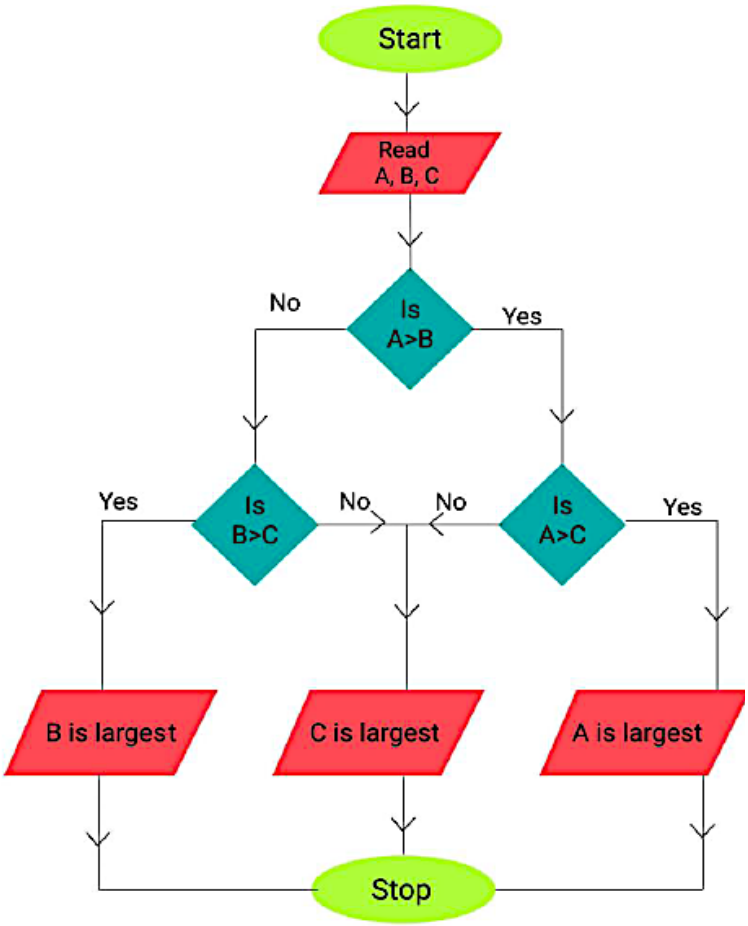
```
# Input number
num = float(input("Enter a number: "))

# Check condition
if num > 0:
    print("Number is Positive")
elif num < 0:
    print("Number is Negative")
else:
    print("Number is Zero")
```

8. Program shall accept three numbers and find the largest of three numbers.

Algorithm:

Step 1: Start
Step 2: Input A, B, C
Step 3: If A is greater than B and A is greater than C, then print A as Largest
Step 4: Else if B is greater than A and B greater than C, then print B as Largest
Step 5: Else print C is Largest
Step 6: Stop

Flow Chart:



Code

```
# Input three numbers
a = float(input("Enter first number: "))
b = float(input("Enter second number: "))
c = float(input("Enter third number: "))

# Check and print largest
if a >= b and a >= c:
    print("Largest number =", a)
elif b >= a and b >= c:
    print("Largest number =", b)
else:
    print("Largest number =", c)

# Alternate method using built in functions
a, b, c = map(float, input("Enter 3 numbers: ").split())
print("Largest number =", max(a, b, c))
```