Exercise 19:

**1.Step-by-Step Process:**

1. **Input height and weight**: Obtain the person's height (in meters) and weight (in kilograms).
2. **Apply the BMI formula**: Use the formula: BMI=Weight/(Height\*Height)
3. **Compare BMI**: Based on the calculated BMI, determine the weight status using the following categories:

* BMI < 18.5: Thin
* 18.5 ≤ BMI ≤ 24.9: Normal
* 25 ≤ BMI ≤ 29.9: Fat
* BMI ≥ 30: Obesity

1. **Output result**: Display the BMI value and corresponding weight status.

**2.Flowchart:**

A diagram of a flowchart

Description automatically generated

**3.Pseudocode:**

#BMI  
def BMI(h,w):  
 return round((w/(h\*h)),1)  
def Classify(BMI):  
 if BMI<18.5: print('Thin')  
 elif (18.5<=BMI<=24.9):return ('Normal')  
 elif (25<=BMI<=29.9): return ('Slightly Fat')  
 elif (30<=BMI<=34.9): return ('Obesity level 1')  
 elif (35 <= BMI <= 39.9):return ('Obesity level 2')  
 elif (40 <= BMI):return ('Obesity level 3')  
def Risk\_of\_diease(BMI):  
 if BMI<18.5: return 'Low'  
 elif BMI<=24.9: return 'Normal'  
 elif BMI<=34.9: return 'High'  
 elif BMI<=34.9: return 'High'  
 elif BMI<=39.9: return 'Very High'  
 else: return 'Danger'  
h=float(input('Height(m):'))  
w=float(input('Weight(Kg):'))  
BMI=BMI(h,w)  
print('Your BMI:',BMI)  
print('Classify:',Classify(BMI))  
print('Risk of Disease',Risk\_of\_diease(BMI))