

# Experiment - 1.1.5. Student Pass or Fail Status

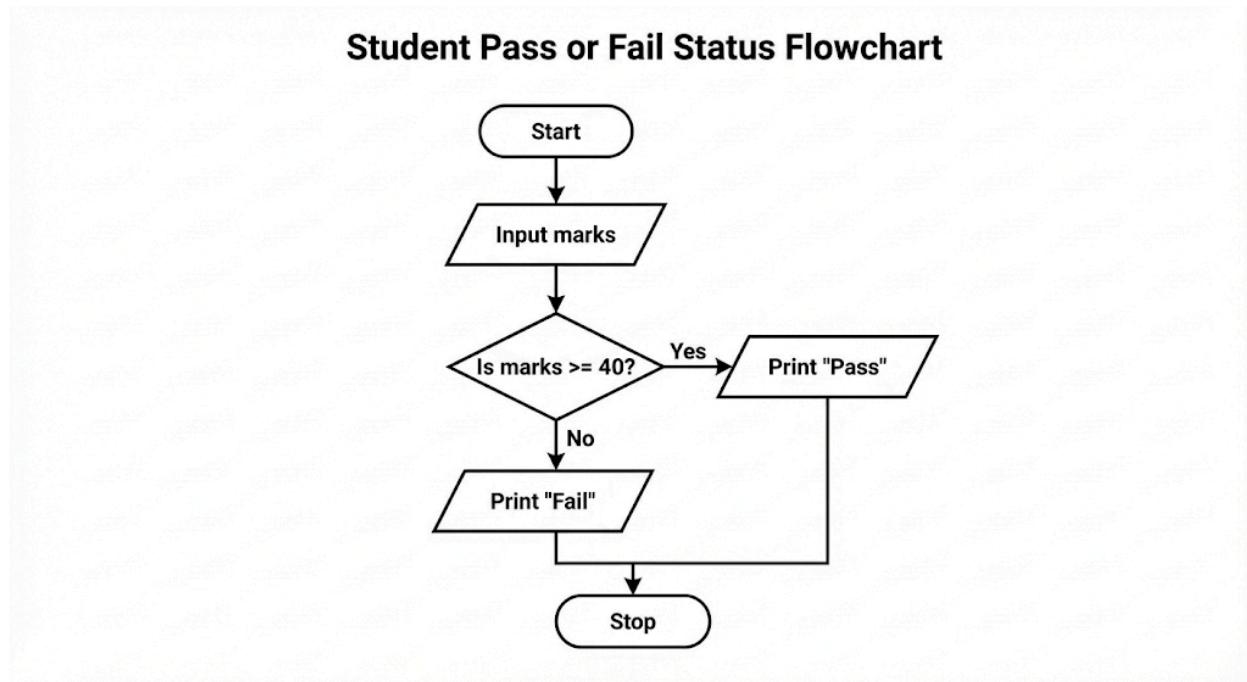
## 1. Aim

To design and implement a Python program that determines a student's examination status based on their marks. The program evaluates whether the student has passed or failed using a threshold of 40 marks (Pass:  $\text{marks} \geq 40$ , Fail:  $\text{marks} < 40$ ).

## 2. Pseudocode

1. **START**
2. **READ** the input value from the user and convert it to an integer.
3. **STORE** the value in the variable marks.
4. **IF** marks is greater than or equal to 40:
  - o **PRINT** "Pass"
5. **ELSE:**
  - o **PRINT** "Fail"
6. **END**

## 3. Flowchart



## 4. Python Program

```
# Program to determine student pass/fail status
# Input: marks as an integer
```

```
# Output: "Pass" or "Fail" based on criteria
```

```
# Taking marks as input  
marks = int(input())
```

```
# Conditional check for passing criteria  
if marks >= 40:  
    print("Pass")  
else:  
    print("Fail")
```

## 5. Experiment Screenshot

The screenshot shows the CodeTantra IDE interface. The title bar says "CODETANTRA" and "1.1.5. Student Pass or Fail Status". The code editor contains the following Python script:

```
marks = int(input())  
if marks >= 40:  
    print("Pass")  
else:  
    print("Fail")
```

The code editor has tabs for "Explorer" and "passOrFa...". Below the code, performance metrics are shown: Average time 0.003 s (3.00 ms), Maximum time 0.004 s (4.00 ms). It also displays test case results: 3 out of 3 shown test case(s) passed and 4 out of 4 hidden test case(s) passed.

Test case 1 details:

- Expected output: 45
- Actual output: 45
- Status: Pass

At the bottom, there are buttons for "Prev", "Reset", "Submit", and "Next >".