

# Py-Batch02-April-4th-WTQ (Python)

## 1. ATM Withdrawal Checker

**Requirement:**

- Ask the user to enter their account balance and the withdrawal amount.
- Check if the withdrawal amount is less than or equal to the balance.
- If yes, allow the withdrawal and show the remaining balance.
- If no, show "Insufficient Balance."

## 2. Age Group Classifier

**Requirement:**

- Get user's age as input.
- Classify into:
  - 0–12: Child
  - 13–19: Teen
  - 20–59: Adult
  - 60 and above: Senior
- Use `if-elif-else` for classification.

## 3. Username Length Validator

**Requirement:**

- Ask the user to enter a username.
- Validate if the length is between 5 and 15 characters.
- Print "Valid Username" or "Invalid Username Length."

## 4. Email Validator (Basic)

### **Requirement:**

- Ask user to input an email.
- Check if it contains "@" and ends with ".com" or ".in".
- Print "Valid Email" or "Invalid Email."

## 5. Simple Grade Checker

### **Requirement:**

- Ask for the marks (0–100).
- Print grade:
  - 90–100: A
  - 75–89: B
  - 50–74: C
  - Below 50: Fail
- Validate that input is between 0–100.

## 6. Name Reverser

### **Requirement:**

- Input full name from user.
- Print the name reversed (e.g., Arivu Mahesh → hsehaM uvirA).
- Also display length of the name using `len()`.

## 7. Personalized Greeting App

### **Requirement:**

- Ask user's name and time of the day (morning, afternoon, evening).

- Print greeting like: Good morning, Arivu!
- Use f-strings for formatting.

## 8. BMI Calculator

### **Requirement:**

- Ask for weight in kg and height in meters.
- Formula:  $BMI = \text{weight} / (\text{height} ** 2)$
- Print the BMI and category:
  - <18.5: Underweight
  - 18.5–24.9: Normal
  - 25–29.9: Overweight
  - 30+: Obese

## 9. Even or Odd Checker

### **Requirement:**

- Ask user to input a number.
- Check using % operator.
- Print "Even" or "Odd".

## 10. Mobile Number Verifier

### **Requirement:**

- Ask for a mobile number as a string.
- Check:
  - It's exactly 10 digits.
  - All characters are digits.
- If valid, print: "Mobile number accepted."

## 11. Simple Calculator

**Requirement:**

- Ask for two numbers and an operator (+, -, \*, /).
- Perform the operation.
- Handle division by zero using condition.

## 12. Movie Ticket Booking (Age Check)

**Requirement:**

- Ask for age.
- If age is 18+, allow booking of "A" rated movie.
- Else, show: "You are not eligible."

## 13. Password Strength Checker

**Requirement:**

- Ask for a password.
- Validate:
  - At least 8 characters.
  - Contains both letters and numbers (basic).
- Print "Strong Password" or "Weak Password".

## 14. User Info Summary

**Requirement:**

- Ask for name, age, email.

- Print a summary like:

Name: mahesh

Age: 25

Email: [mahesh@example.com](mailto:mahesh@example.com)

- Use f-string for display.

## 15. Leap Year Checker

### **Requirement:**

- Ask for a year.
- Check using logic:
  - If divisible by 4 and (not divisible by 100 or divisible by 400).
- Print whether it's a leap year.

## 16. Number Comparison App

### **Requirement:**

- Get two numbers from the user.
- Print the larger number.
- If equal, say: "Both numbers are equal."

## 17. Simple Voting System

### **Requirement:**

- Ask user for age.
- If 18 or above, allow voting.
- Else, show how many years left to be eligible.

## 18. Pet Age Calculator

**Requirement:**

- Ask if the pet is a dog or cat.
- Ask for its age.
- Convert to human years:
  - Dog: age × 7
  - Cat: age × 6
- Display result.

## 19. Login System (Hardcoded)

**Requirement:**

- Ask for username and password.
- Validate with hardcoded values (e.g., username = "admin", password = "1234").
- If matched, print "Login Successful", else "Access Denied".

## 20. Word Count Checker

**Requirement:**

- Ask the user to enter a sentence.
- Use `split()` and `len()` to count words.
- Print: "This sentence has X words."