8. Find the sum of the squares and cubes of the first 50 natural numbers.

Pseudocode

```
START
    sumSquares = 0
    sumCubes = 0

    FOR i = 1 TO 50
        sumSquares = sumSquares + (i * i)
        sumCubes = sumCubes + (i * i * i)
    END FOR

    PRINT sumSquares
    PRINT sumCubes
STOP
```

9. Find the sum of girls' and boys' marks in the class

Pseudocode

```
START
    girlsSum = 0
    boysSum = 0

    INPUT numberOfStudents

    FOR i = 1 TO numberOfStudents
        INPUT gender
        INPUT marks

        IF gender = "Girl" THEN
            girlsSum = girlsSum + marks
        ELSE IF gender = "Boy" THEN
            boysSum = boysSum + marks
        END IF
    END FOR

    PRINT "Total girls' marks =", girlsSum
    PRINT "Total boys' marks =", boysSum
STOP
```

10. Convert the temperature from Fahrenheit to Celsius or vice versa.

- Fahrenheit to Celsius:

$$C = \frac{(F - 32) \times 5}{9}$$

- Celsius to Fahrenheit:

$$F = \frac{(C \times 9)}{5} + 32$$

```
START
    PRINT "1. Fahrenheit to Celsius"
    PRINT "2. Celsius to Fahrenheit"

    INPUT choice
    INPUT temperature

    IF choice = 1 THEN
        celsius = (temperature - 32) * 5 / 9
        PRINT celsius
    ELSE IF choice = 2 THEN
        fahrenheit = (temperature * 9 / 5) + 32
        PRINT fahrenheit
    ELSE
        PRINT "Invalid choice"
    END IF
STOP
```