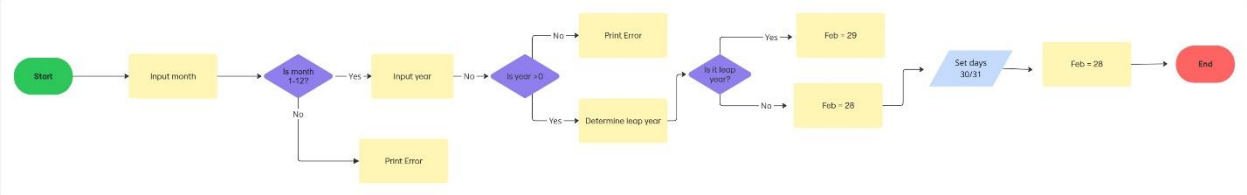
Programming project 4

First Program-

Flow Chart:



Math work:

Pseudocode:

READ month

IF month not in 1..12 → Error, stop

READ year

IF year <= 0 → Error, stop

isLeap ← (year % 400 == 0) OR (year % 100 != 0) AND (year % 4 == 0))

IF month = 2 → days ← (isLeap ? 29 : 28)

ELSE IF month in {4,6,9,11} → days ← 30

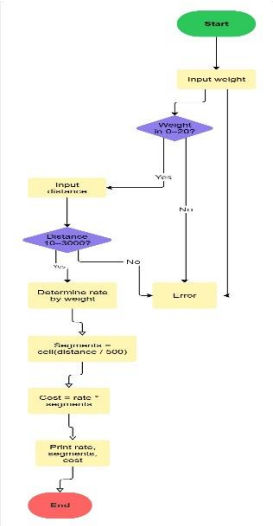
ELSE → days ← 31

PRINT days

Programming project 4

Second Program-

Flow Chart:



Pseudocode:

READ weight (kg) → must 0 < w ≤ 20

READ distance (mi) → must 10..3000

rate ← 1.10 (≤2) | 2.20 (≤6) | 3.70 (≤10) | 4.80 (≤20)

segments ← ceil(distance / 500)

cost ← rate × segments

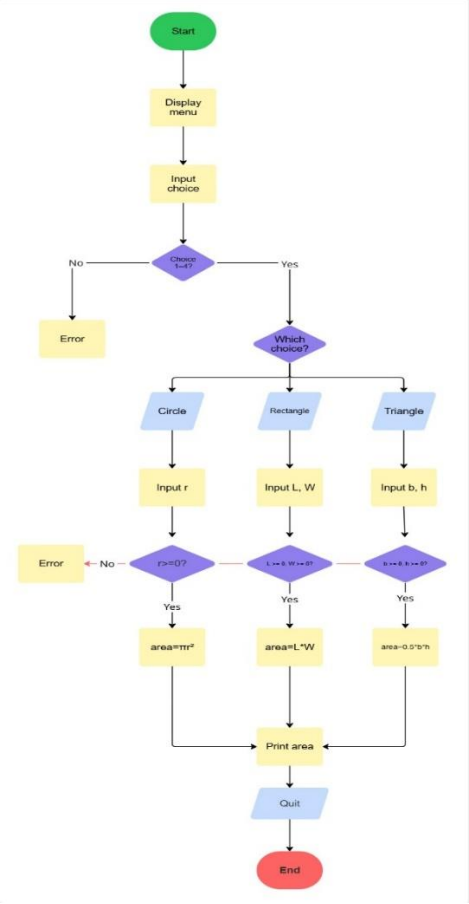
PRINT rate, segments, cost

Math work:

Programming project 4

Third Program-

Flow Chart:



Pseudocode:

Programming project 4

PRINT menu (1–4), READ choice

IF choice not 1..4 → Error, stop

IF 1: READ r (≥0), area = 3.14159 * r^2

IF 2: READ L,W (≥0), area = L * W

IF 3: READ b,h (≥0), area = 0.5 * b * h

IF 4: PRINT "Goodbye"

PRINT area (for 1..3)

Math work: