For Loop Example

2023-T1 CSD 1133 FSDM Group1

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Q1. Investment Simulator for Banker

- Input
  - Invest amount : 10000
  - Interest rate : 5%
  - Invest year : 10

- Output
  - 1: 10500
  - 2: 11025
  - .
  - .
  - 10: ??????

For i = 1 to year
    Set interest = balance * rate
    Set balance = balance + interest

    Display i, ": ", balance
End For

Q2. Multiplication table

- Input
  - Number : 7
- Output
  - 7 x 1 = 7
  - 7 x 2 = 14
  - .
  - .
  - .
  - 7 x 9 = 63

For i = 1 to 9
    Set prod = number * i
    Display i, " x ", number, " = ", prod
End For

Q3. Full Multiplication table (Nested Loop)

- Input
  - Start : 3
  - End : 7

- Output
  - 3 x 1 = 3
  - .
  - 3 x 9 = 27
  - 4 x 1 = 1
  - .
  - .
  - 7 x 1 = 7
  - .
  - 7 x 9 = 63

For i = start to end

    For j = 1 to 9
        Set prod = i * j
        Display i, " x ", j, " = ", prod
    End For

End For

Q4. Factors

- Input
  - Number : 12

- Output
  - 1
  - 2
  - 3
  - 4
  - 6
  - 12

For i = 1 to number
    If number % i == 0 Then
        Display i
    End If
End For

Thank You