Loops:

1) Reverse a number:

   Start the program
   Input: Enter the number
   Processing: SET reversed = 0
              WHILE number > 0
                   digit = number % 10
                   reversed = reversed * 10 + digit
                   number = number / 10
              END WHILE
   Output: PRINT reversed
   End of the program

2) Factorial of a number:

   Start the program
   Input: Enter the value of n
   Processing: Set factorial = 1
              For (i=1 to n)
              Set factorial = factorial * i
   Output: Print factorial
   End of the program

3) Check if the string is a palindrome

   Start the program
   Input: Enter the string
   Processing: Set reversed = reverse of String
              If string == reversed THEN
              Print "Palindrome"
              Else Print "Not a palindrome"
   End of the program

4) Reverse a string

   Start the program
   Input: Enter the string
   Processing: Set reversed = ""
              For (i=len(string)-1 to 0), Set reversed = reversed + string[i]
   Output: Print reversed
   End of the program

5) Reverse each word of a string

Start the program
Input: Enter the Sentence
Processing: Split sentence into words
           For(each word in words)
                Reverse the word
                Print reverse word with space
End of the program

6) Check if a number is prime

Start the program
Input: Enter the num
Processing: Set isPrime = true
           If num<=1 then Set isPrime = false
           Else
              For(i=2 to num/2)
                if(num%i==0) then
                    Set isPrime = false
                    Break;
Output: Print " isPrime =" + isPrime;
End of the program

7) Display first 100 prime numbers

Start the program
Input: Set count = 0, Set number = 2
Processing: While count < 100
           Set isPrime = true
           For (i = 2 TO sqrt(number))
             if number % i == 0 THEN
                Set isPrime = false
                BREAK
             End IF
           End FOR
           If isPrime THEN
             Print number
             Set count = count++
           End IF
           Set number = number++
         End WHILE
         End of the program

8) Display numbers in pyramid fashion

Start of the program
Input: Enter the value for rows
Processing: Set num = 1
    For (i = 1 to rows)
     For (j = 1 to rows - i)
      PRINT space
     END FOR
     For (k = 1 to i)
      PRINT num
      Set num = num++
     END FOR
     PRINT newline
    END FOR
End of the program