

10 REM To generate Fibonacci series and search for Primes

18 PRINT "N = ";

20 INPUT N

24 PRINT

30 LET F1 = 1

40 LET F2 = 1

55 PRINT "I = "; 1, "F="; 1; "(prime)"

58 PRINT "I = "; 2, "F="; 1; "(prime)"

60 FOR I = 3 TO N

70 LET F = F1 + F2

73 FOR J = 2 TO INT(SQR(F))

74 LET Q = F / J

75 LET Q1 = INT(Q)

76 IF Q = Q1 THEN 81

77 NEXT J

79 PRINT "I="; I, "F="; F; "(Prime)"

80 GOTO 82

81 PRINT "I = "; I, "F="; F

82 LET F2 = F1

100 LET F1 = F

110 NEXT I

120 END

Output

N = ?

N = 10

I = 1    F = 1 (Prime)

I = 2    F = 1 (Prime)

I = 3    F = 2 (Prime)

I = 4    F = 3 (Prime)

I = 5    F = 5 (Prime)

$$I = 6 \quad F = 8$$

$$I = 7 \quad F = 13 \text{ (Prime)}$$

$$I = 8 \quad F = 21$$

$$I = 9 \quad F = 34$$

$$I = 10 \quad F = 55$$