

```

(i) Code on matlab for fixed point iteration method
commandwindow
clear
clc
format short g
syms p
p=0.35
for i=1:inf
    iter(i+1)=i
    p(i+1)=16.7*(1-exp(-0.147*p(i)));
    Ea(i+1)=abs((p(i+1)-
p(i))/p(i+1))*100;
    if Ea(i+1)<=1E-11
    break
end
end
iter'
p'
Ea'
table(iter',p',Ea')

```

Output:

p =

0.35

Warning: Too many FOR loop iterations. Stopping after 9223372036854775806 iterations.

> In Untitled33333 (line 7)

iter =

0 1

iter =

0 1 2

iter =

0 1 2 3

iter =

0 1 2 3 4

iter =

0 1 2 3 4 5

iter =

0 1 2 3 4 5 6

iter =

0 1 2 3 4 5 6 7

iter =

0 1 2 3 4 5 6 7 8

iter =

0 1 2 3 4 5 6 7 8 9

iter =

0 1 2 3 4 5 6 7 8 9 10

iter =

0 1 2 3 4 5 6 7 8 9 10 11

iter =

0 1 2 3 4 5 6 7 8 9 10 11 12

iter =

0 1 2 3 4 5 6 7 8 9 10 11 12 13

iter =

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14

iter =

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15

iter =

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16

iter =

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17

iter =

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18

iter =

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Column 21

20

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 22

20 21

Columns 21 through 22

20 21

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 23

20 21 22

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 24

20 21 22 23

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 25

20 21 22 23 24

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 26

20 21 22 23 24 25

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 27

20 21 22 23 24 25 26

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 28

20 21 22 23 24 25 26 27

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 29

20 21 22 23 24 25 26 27 28

iter =

Columns 1 through 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17 18 19

Columns 21 through 30

20 21 22 23 24 25 26 27 28 29

ans =

0

ans =

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29

ans =

- 0.35
- 0.83749
- 1.9344
- 4.1333
- 7.6042
- 11.239
- 13.5
- 14.405
- 14.69
- 14.773
- 14.796
- 14.803
- 14.805
- 14.805
- 14.805
- 14.805

14.805
14.805
14.805
14.805
14.805
14.805
14.805
14.805
14.805
14.805
14.805
14.805
14.805
14.805
14.805

ans =

0
58.208
56.706
53.199
45.644
32.342
16.745
6.2813
1.946
0.55982
0.15736
0.043941
0.012247
0.0034116
0.00095021
0.00026464
7.3706e-05
2.0528e-05
5.7172e-06
1.5923e-06
4.4347e-07
1.2351e-07
3.4399e-08
9.5803e-09
2.6682e-09
7.4311e-10
2.0697e-10
5.7651e-11
1.6053e-11
4.4633e-12

ans =

1.2351e-07
3.4399e-08
9.5803e-09
2.6682e-09
7.4311e-10
2.0697e-10
5.7651e-11
1.6053e-11
4.4633e-12

ans =

30×3 table

Var1	Var2	Var3
0	0.35	0
1	0.83749	58.208
2	1.9344	56.706
3	4.1333	53.199
4	7.6042	45.644
5	11.239	32.342
6	13.5	16.745
7	14.405	6.2813
8	14.69	1.946
9	14.773	0.55982
10	14.796	0.15736
11	14.803	0.043941
12	14.805	0.012247
13	14.805	0.0034116
14	14.805	0.00095021
15	14.805	0.00026464
16	14.805	7.3706e-05
17	14.805	2.0528e-05
18	14.805	5.7172e-06
19	14.805	1.5923e-06
20	14.805	4.4347e-07
21	14.805	1.2351e-07
22	14.805	3.4399e-08
23	14.805	9.5803e-09
24	14.805	2.6682e-09
25	14.805	7.4311e-10
26	14.805	2.0697e-10
27	14.805	5.7651e-11
28	14.805	1.6053e-11
29	14.805	4.4633e-12