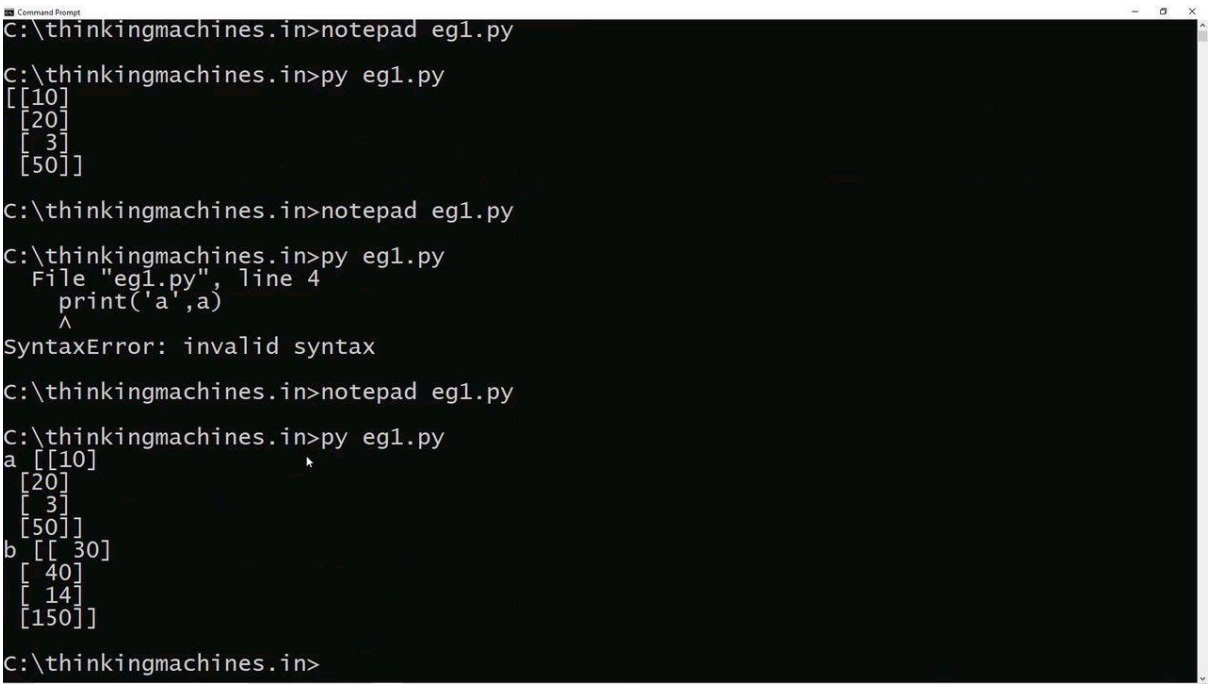
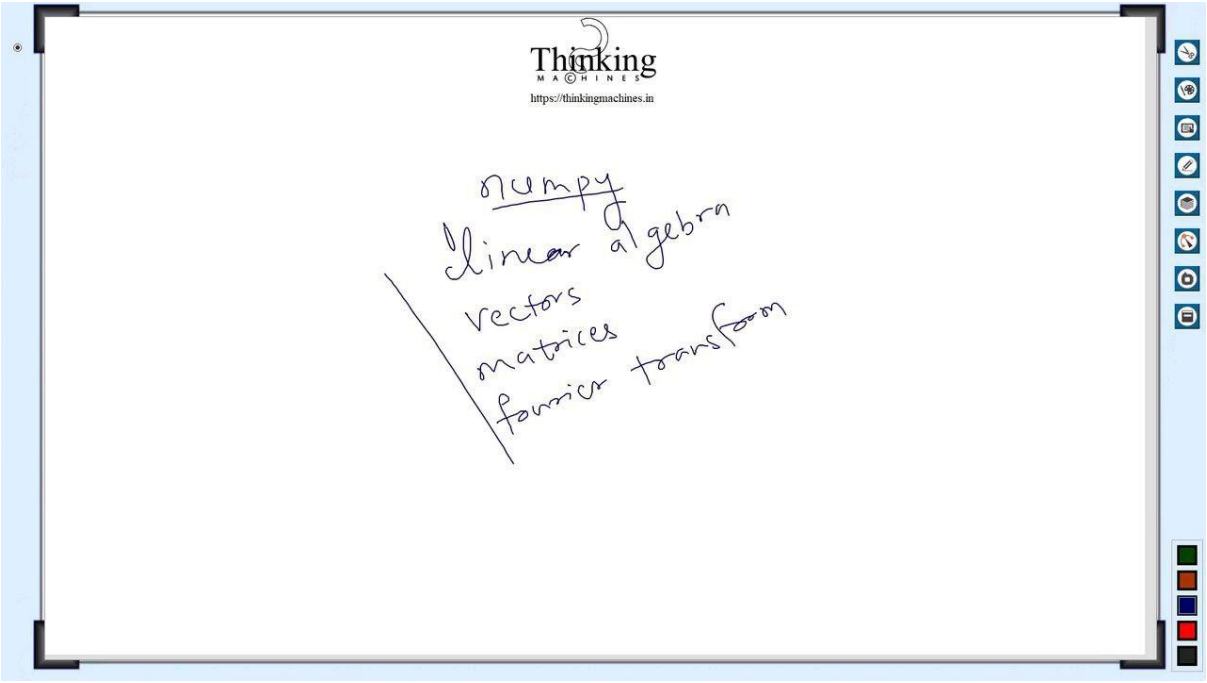
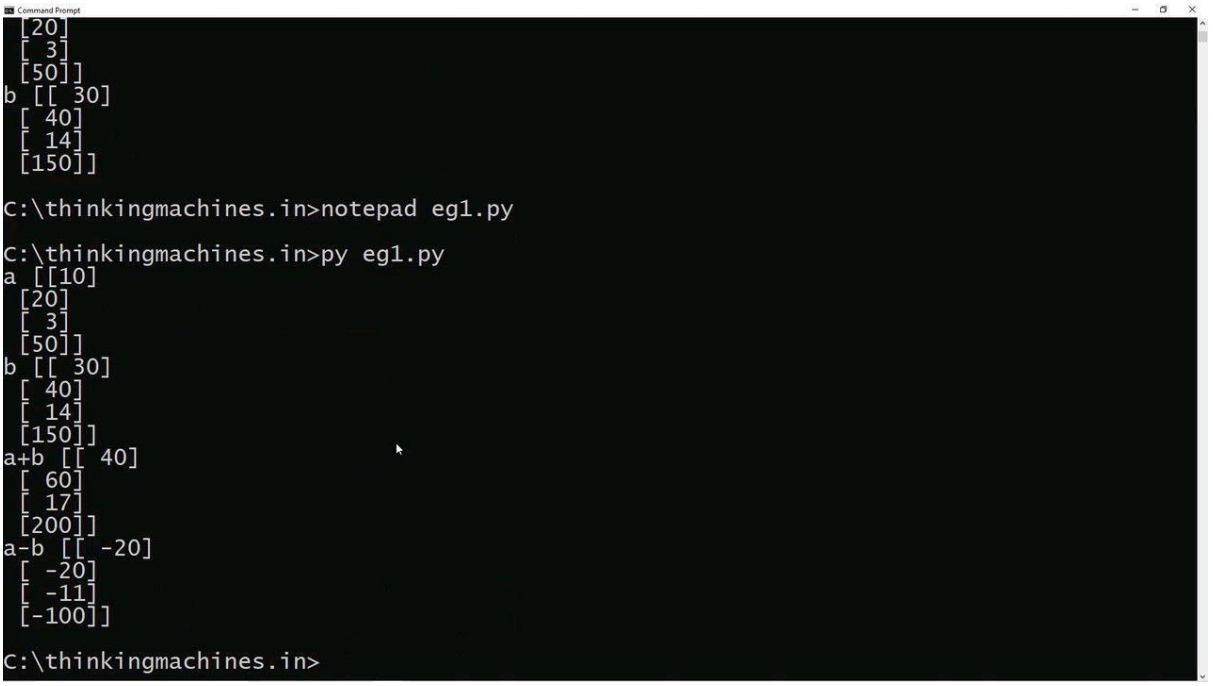
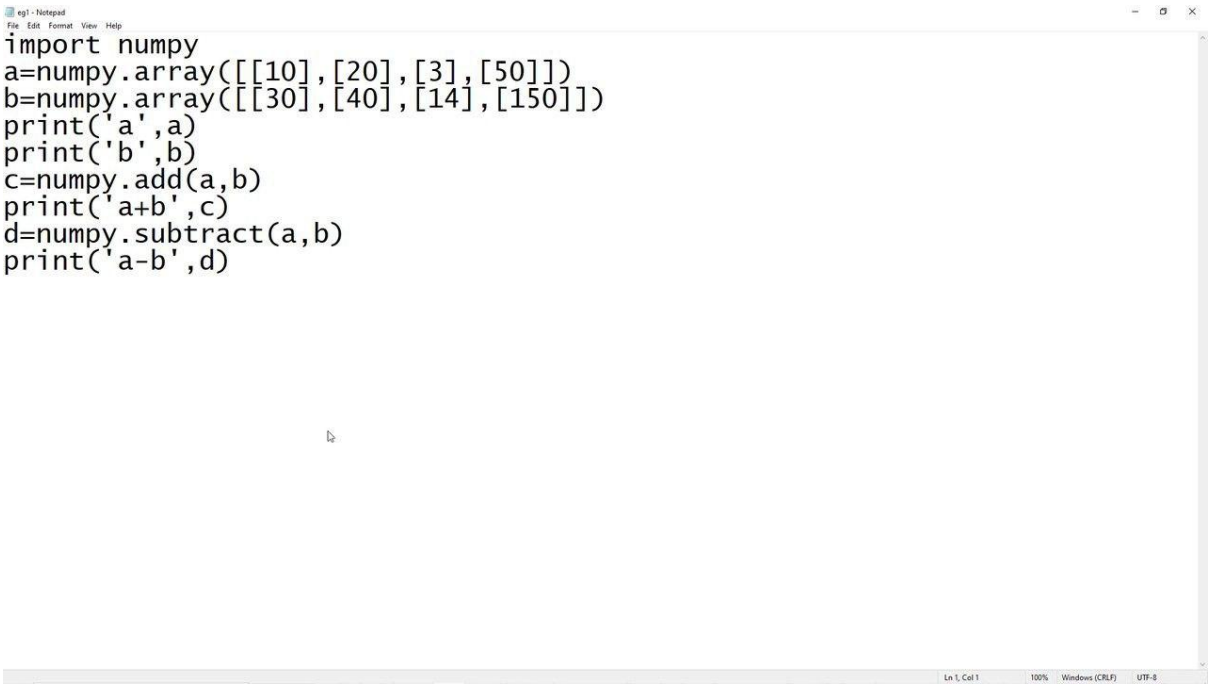

*eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([[10],[20],[3],[50]])
b=numpy.array([[30],[40],[14],[150]])
print('a',a)
print('b',b)
c=numpyu
Ln 6, Col 9
100%
Windows (CRLF)
UTF-8

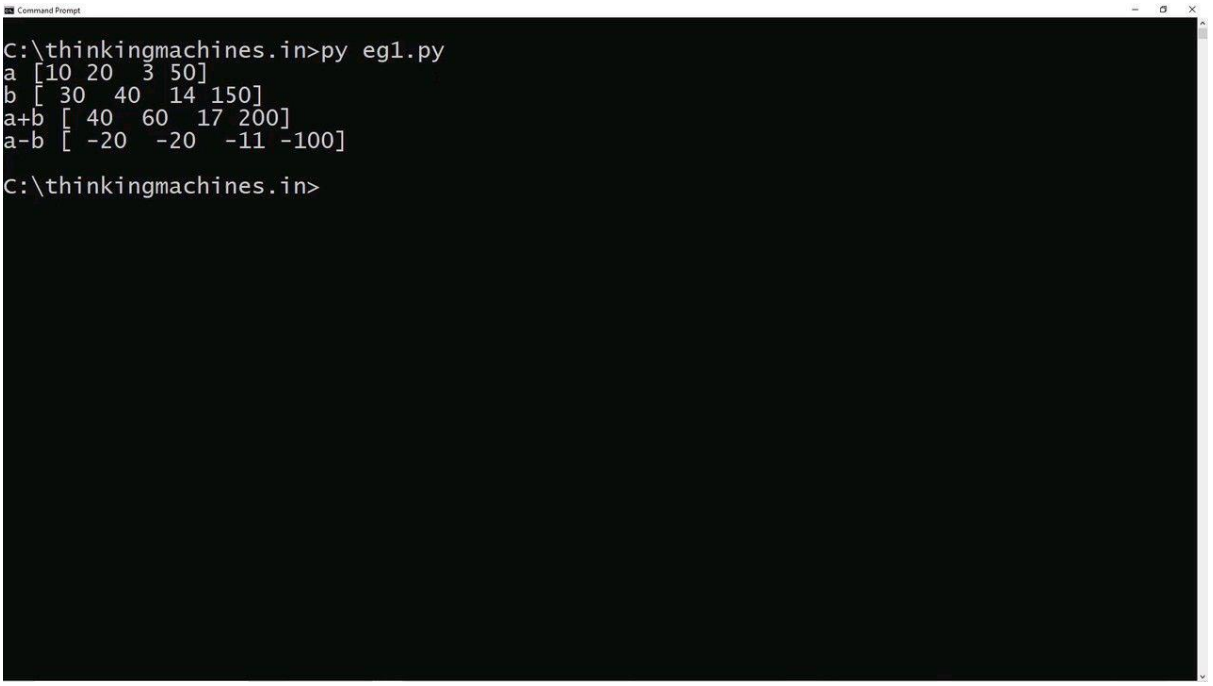

Command Prompt
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
[[10]
[20]
[3]
[50]]
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
File "eg1.py", line 4
print('a',a)
^
SyntaxError: invalid syntax
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
a [[10]
[20]
[3]
[50]]
b [[30]
[40]
[14]
[150]]
C:\thinkingmachines.in>

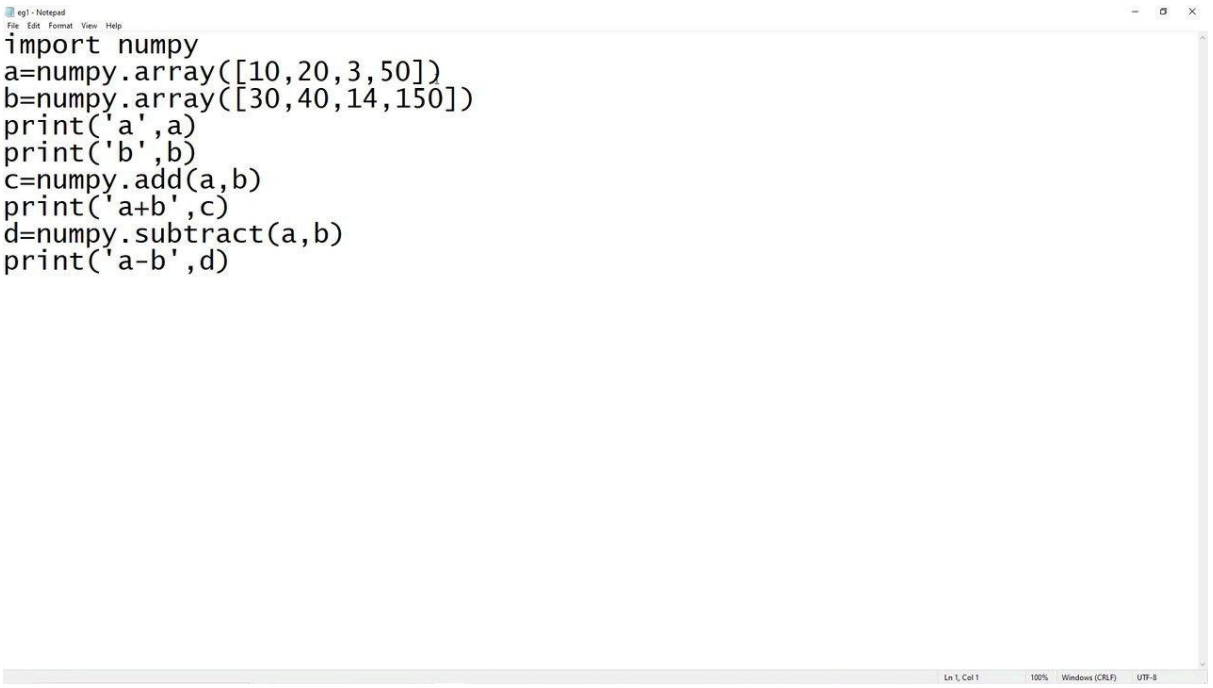
```
Command Prompt
C:\thinkingmachines.in>notepad eg1.py

C:\thinkingmachines.in>py eg1.py
[[10]
 [20]
 [ 3]
 [50]]

C:\thinkingmachines.in>notepad eg1.py

C:\thinkingmachines.in>py eg1.py
  File "eg1.py", line 4
    print('a',a)
    ^
SyntaxError: invalid syntax

C:\thinkingmachines.in>notepad eg1.py

C:\thinkingmachines.in>py eg1.py
a [[10]
 [20]
 [ 3]
 [50]]
b [[ 30]
 [ 40]
 [ 14]
 [150]]

C:\thinkingmachines.in>
```




Command Prompt
[20]
[3]
[50]]
b [[30]
[40]
[14]
[150]]
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
a [[10]
[20]
[3]
[50]]
b [[30]
[40]
[14]
[150]]
a+b [[40]
[60]
[17]
[200]]
a-b [[-20]
[-20]
[-11]
[-100]]
C:\thinkingmachines.in>


eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([[10],[20],[3],[50]])
b=numpy.array([[30],[40],[14],[150]])
print('a',a)
print('b',b)
c=numpy.add(a,b)
print('a+b',c)
d=numpy.subtract(a,b)
print('a-b',d)
Ln 1, Col 1
100%
Windows (CRLF)
UTF-8


Command Prompt
C:\thinkingmachines.in>py eg1.py
a [10 20 3 50]
b [30 40 14 150]
a+b [40 60 17 200]
a-b [-20 -20 -11 -100]
C:\thinkingmachines.in>

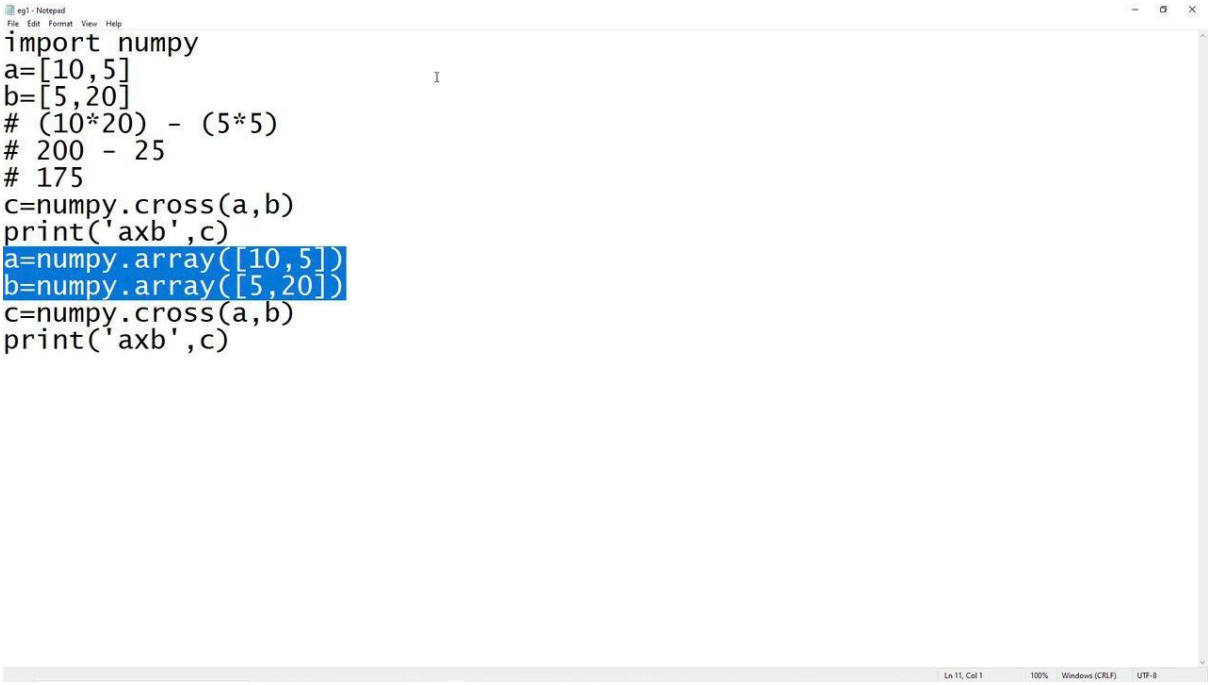

eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([10,20,3,50])
b=numpy.array([30,40,14,150])
print('a',a)
print('b',b)
c=numpy.add(a,b)
print('a+b',c)
d=numpy.subtract(a,b)
print('a-b',d)
Ln 1, Col 1
100%
Windows (CRLF)
UTF-8


eg1 - Notepad
File Edit Format View Help
import numpy
a=[10,5]
b=[5,20]
c=numpy.cross(a,b)
print('axb',c)
Ln 2, Col 4
100%
Windows (CRLF)
UTF-8

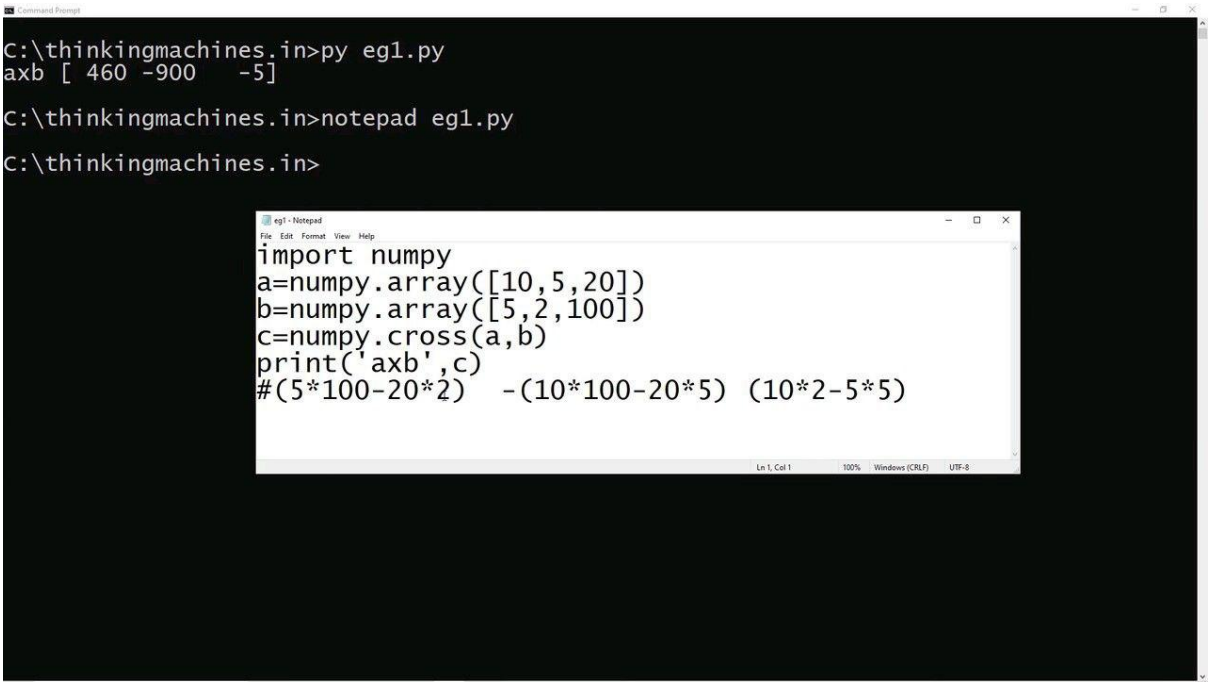

eg1 - Notepad
File Edit Format View Help
import numpy
a=[10,5]
b=[5,20]
# (10*20) - (5*5)
# 200 - 25
# 175
c=numpy.cross(a,b)
print('axb',c)
Ln 6, Col 6
100%
Windows (CRLF)
UTF-8


eg1 - Notepad
File Edit Format View Help
import numpy
a=[10,5]
b=[5,20]
# (10*20) - (5*5)
# 200 - 25
# 175
c=numpy.cross(a,b)
print('axb',c)
Ln 6, Col 6
100%
Windows (CRLF)
UTF-8

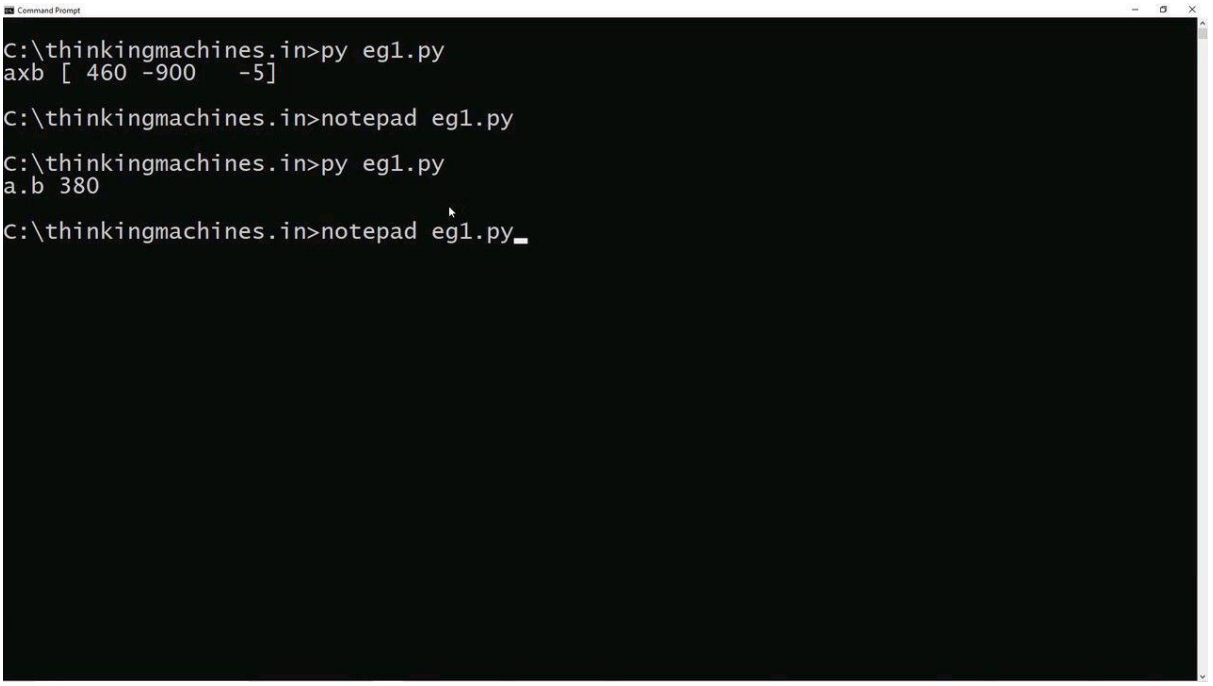

eg1 - Notepad
File Edit Format View Help
import numpy
a=[10,5]
b=[5,20]
# (10*20) - (5*5)
# 200 - 25
# 175
c=numpy.cross(a,b)
print('axb',c)
a=numpy.array([10,5])
b=numpy.array([5,20])
c=numpy.cross(a,b)
print('axb',c)
Ln 8, Col 1
100%
Windows (CRLF)
UTF-8

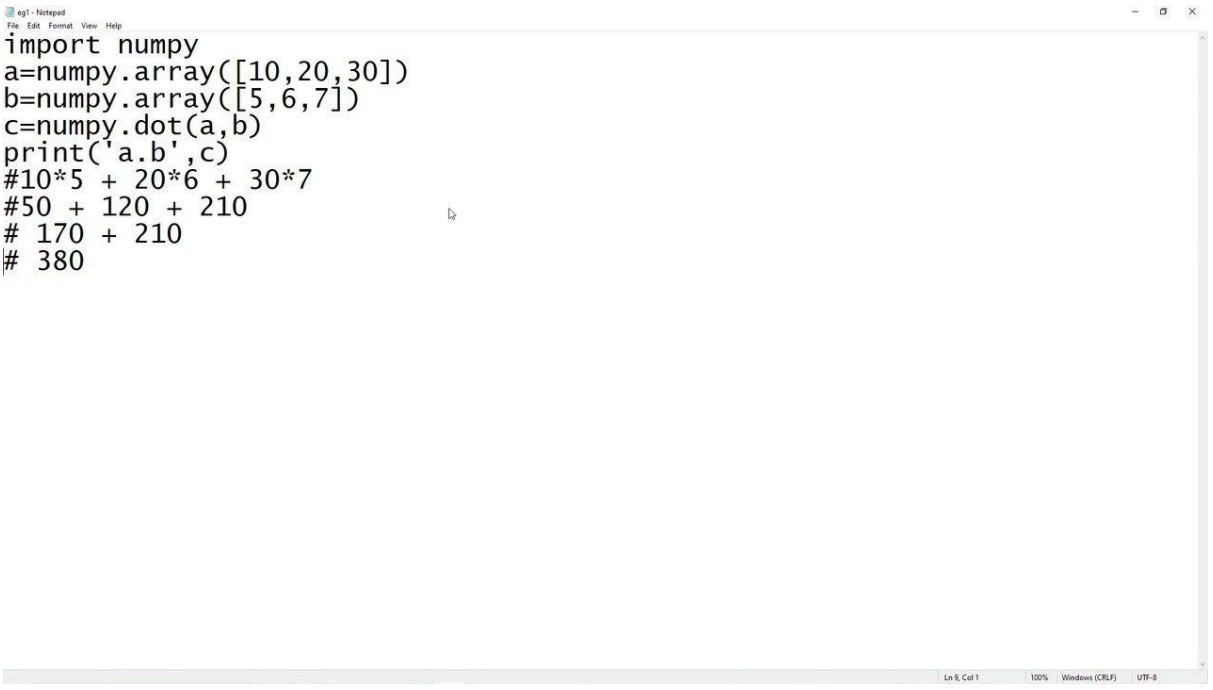

eg1 - Notepad
File Edit Format View Help
import numpy
a=[10,5]
b=[5,20]
# (10*20) - (5*5)
# 200 - 25
# 175
c=numpy.cross(a,b)
print('axb',c)
a=numpy.array([10,5])
b=numpy.array([5,20])
c=numpy.cross(a,b)
print('axb',c)
Ln 11, Col 1
100%
Windows (CRLF)
UTF-8

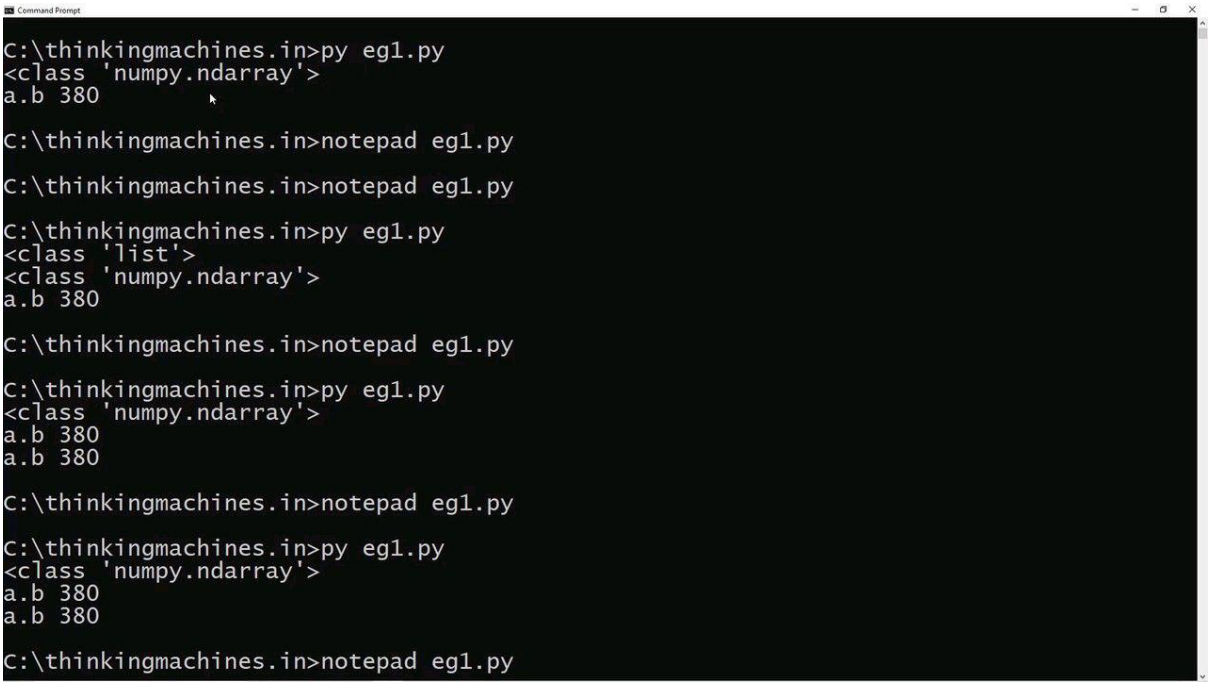

Command Prompt
C:\thinkingmachines.in>py eg1.py
axb [460 -900 -5]
C:\thinkingmachines.in>


Command Prompt
C:\thinkingmachines.in>py eg1.py
axb [460 -900 -5]
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>
eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([10,5,20])
b=numpy.array([5,2,100])
c=numpy.cross(a,b)
print('axb',c)
#(5*100-20*2) -(10*100-20*5) (10*2-5*5)
Ln 1, Col 1
100%
Windows (CRLF)
UTF-8


*eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([10,20,30])
b=numpy.array([5,6,7])
c=numpy.dot(a,b)
print('a.b',c)
Ln 5, Col 15
100%
Windows (CRLF)
UTF-8

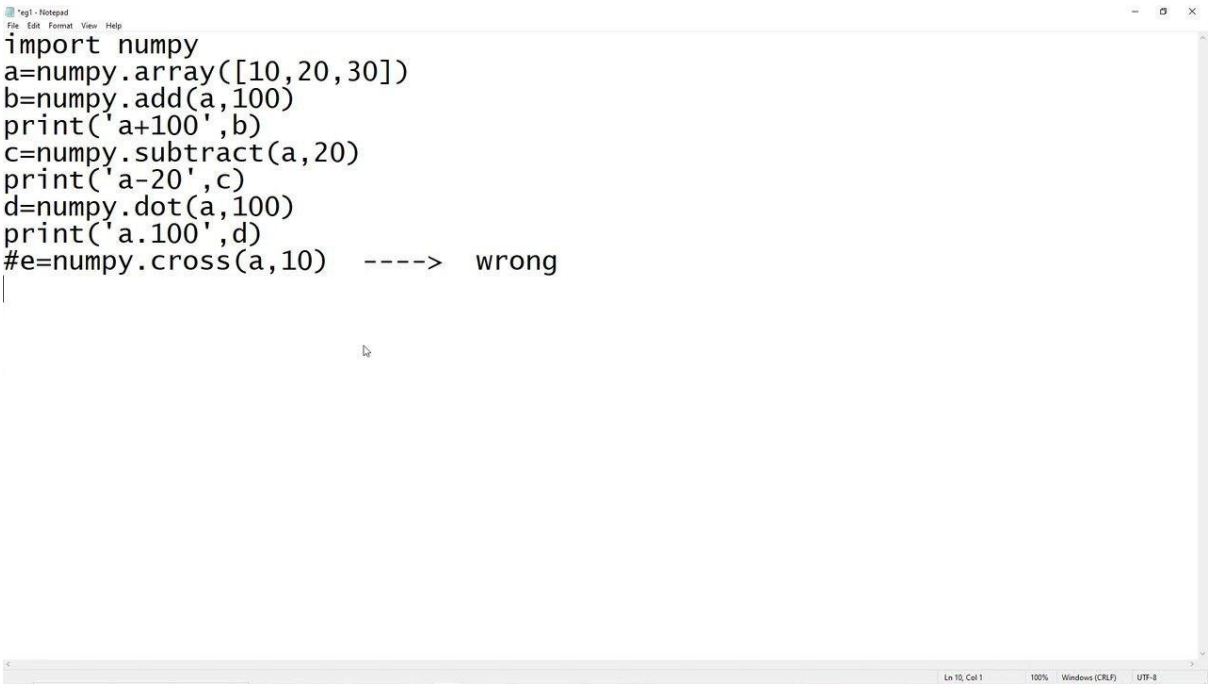

Command Prompt
C:\thinkingmachines.in>py eg1.py
axb [460 -900 -5]
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
a.b 380
C:\thinkingmachines.in>notepad eg1.py


eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([10,20,30])
b=numpy.array([5,6,7])
c=numpy.dot(a,b)
print('a.b',c)
#10*5 + 20*6 + 30*7
#50 + 120 + 210
170 + 210
380
Ln 9, Col 1
100%
Windows (CRLF)
UTF-8


Command Prompt
C:\thinkingmachines.in>py eg1.py
<class 'numpy.ndarray'>
a.b 380
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
<class 'list'>
<class 'numpy.ndarray'>
a.b 380
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
<class 'numpy.ndarray'>
a.b 380
a.b 380
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
<class 'numpy.ndarray'>
a.b 380
a.b 380
C:\thinkingmachines.in>notepad eg1.py


eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([10,20,30])
print(type(a))
b=numpy.array([5,6,7])
c=numpy.dot(a,b)
print('a.b',c)
#10*5 + 20*6 + 30*7
#50 + 120 + 210
# 170 + 210
# 380
d=a@b
print('a.b',d)
Ln 1, Col 1
100%
Windows (CRLF)
UTF-8


*eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([10,20,30])
b=numpy.add(a,100)
print('a+100',b)
c=numpy.subtract(a,20)
print('a-20',c)
d=numpy.dot(a,100)
print('a.100',d)
Ln 9, Col 1
100%
Windows (CRLF)
UTF-8

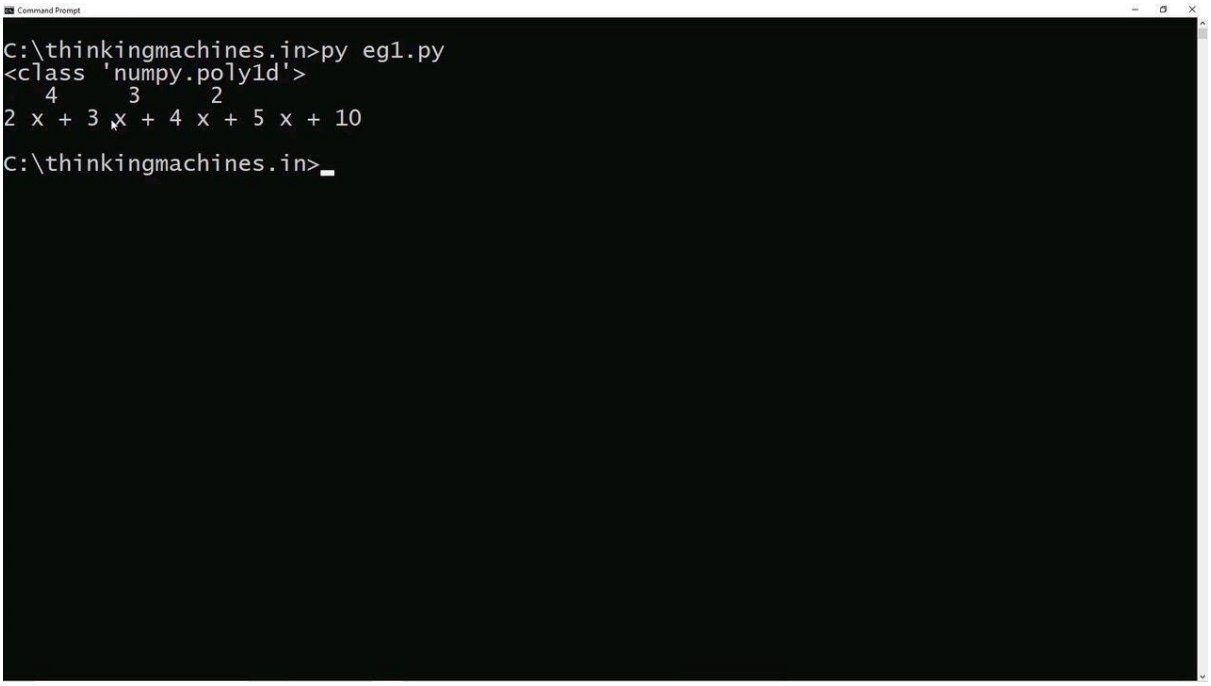

*eg1 - Notepad
File Edit Format View Help
import numpy
a=numpy.array([10,20,30])
b=numpy.add(a,100)
print('a+100',b)
c=numpy.subtract(a,20)
print('a-20',c)
d=numpy.dot(a,100)
print('a.100',d)
#e=numpy.cross(a,10) ----> wrong
Ln 10, Col 1
100%
Windows (CRLF)
UTF-8

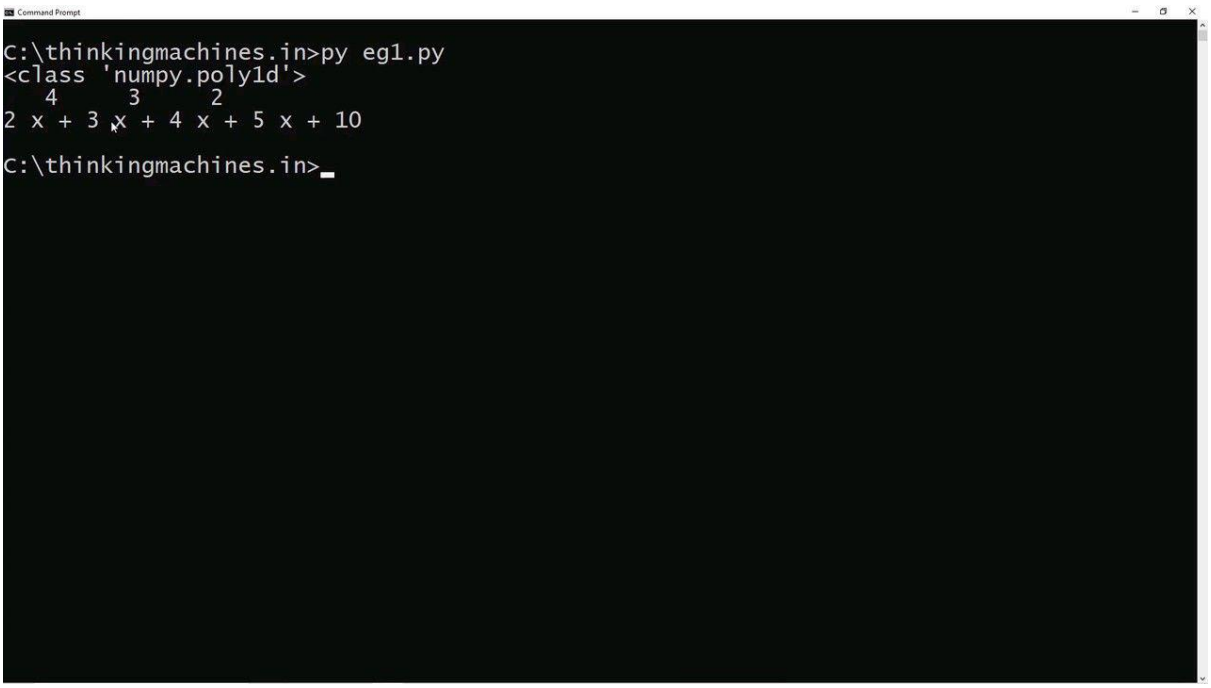
Thinking MACHINES
https://thinkingmachines.in

$2x^4 + 3x^3 + 4x^2 + 5x + 10$

Thinking MACHINES
https://thinkingmachines.in

$2x^4 + 3x^3 + 4x^2 + 5x + 10$


Command Prompt
C:\thinkingmachines.in>py eg1.py
<class 'numpy.poly1d'>
4 3 2
2 x + 3 x + 4 x + 5 x + 10
C:\thinkingmachines.in>

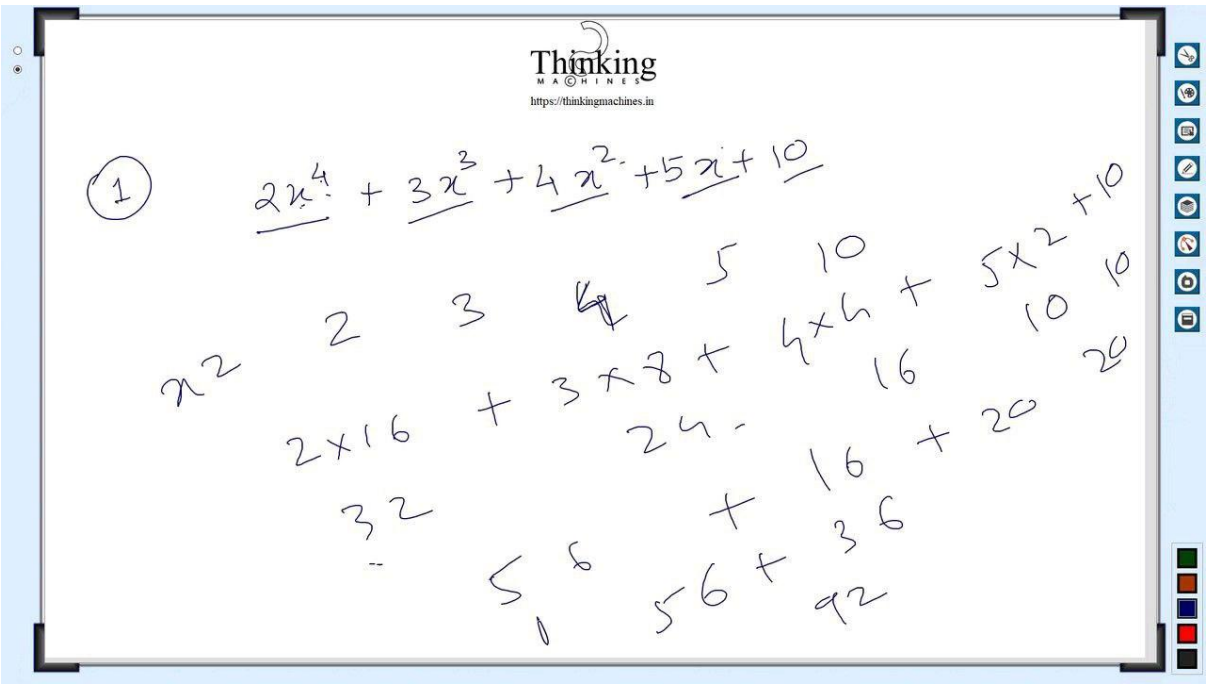

Command Prompt
C:\thinkingmachines.in>py eg1.py
<class 'numpy.poly1d'>
4 3 2
2 x + 3 x + 4 x + 5 x + 10
C:\thinkingmachines.in>

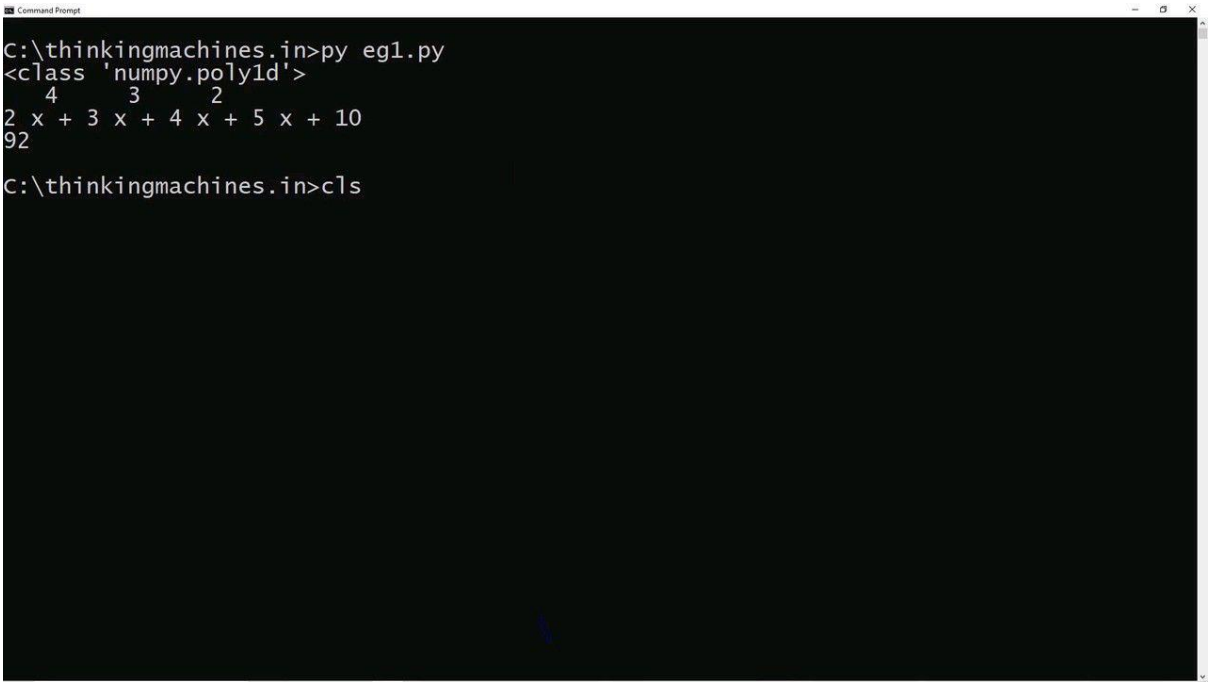
*eg1 - Notepad

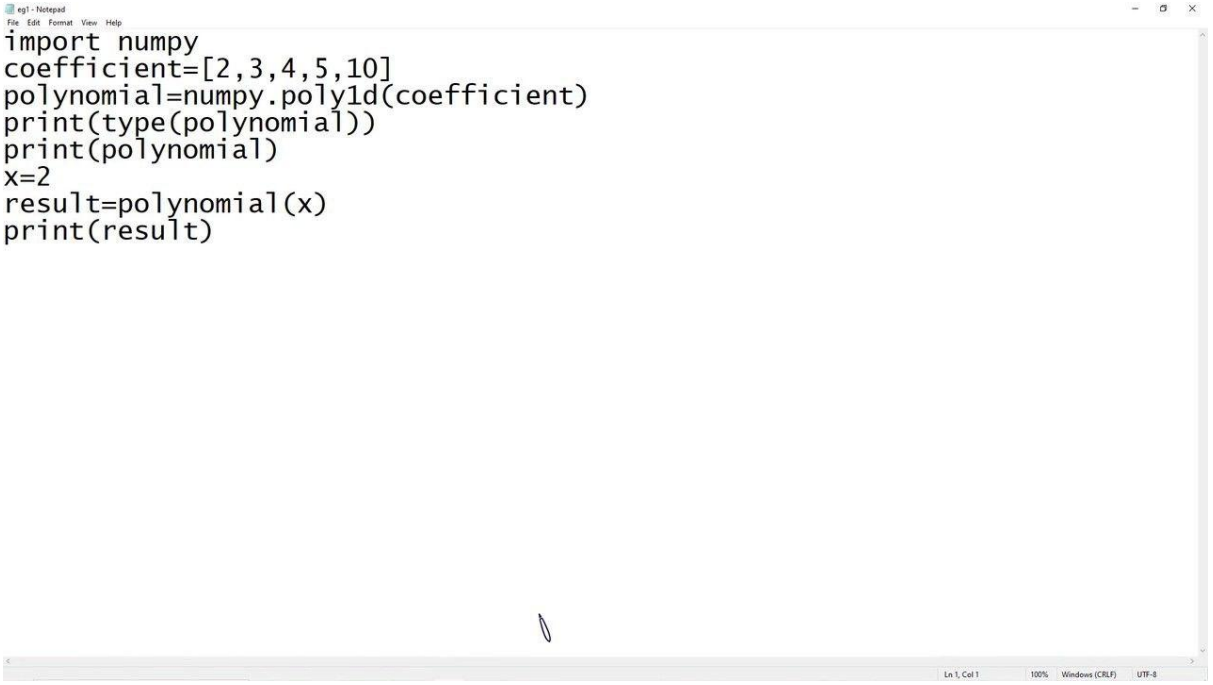
File Edit Format View Help

```
import numpy
coefficient=[2,3,4,5,10]
polynomial=numpy.poly1d(coefficient)
print(type(polynomial))
print(polynomial)
```

Ln 6, Col 1 100% Windows (CRLF) UTF-8




Command Prompt
C:\thinkingmachines.in>py eg1.py
<class 'numpy.poly1d'>
4 3 2
2 x + 3 x + 4 x + 5 x + 10
92
C:\thinkingmachines.in>cls


eg1 - Notepad
File Edit Format View Help
import numpy
coefficient=[2,3,4,5,10]
polynomial=numpy.poly1d(coefficient)
print(type(polynomial))
print(polynomial)
x=2
result=polynomial(x)
print(result)
Ln 1, Col 1
100%
Windows (CRLF)
UTF-8

Thinking MACHINES
https://thinkingmachines.in

(1) $2x^4 + \ldots + 4x^2 + \ldots + 10$

x^2 2 3 4 5 10

$2 \times 16 + 3 \times 8 + 4 \times 4 + 5 \times 2 + 10$

32 24 16 10 10

56 + 16 + 20

56 + 36

92

Thinking MACHINES
https://thinkingmachines.in

(1) $2x^4 + \ldots + 4x^2 + \ldots + 10$

x^2 2 3 4 5 10

$2 \times 16 + 3 \times 8 + 4 \times 4 + 5 \times 2 + 10$

32 24 16 10 10

56 + 16 + 20

56 + 36

92

eg1 - Notepad

File Edit Format View Help

```
import numpy
coefficient=numpy.array([2,3,4,5,10])
polynomial=numpy.poly1d(coefficient)
print(type(polynomial))
print(polynomial)
x=2
result=polynomial(x)
print(result)
```

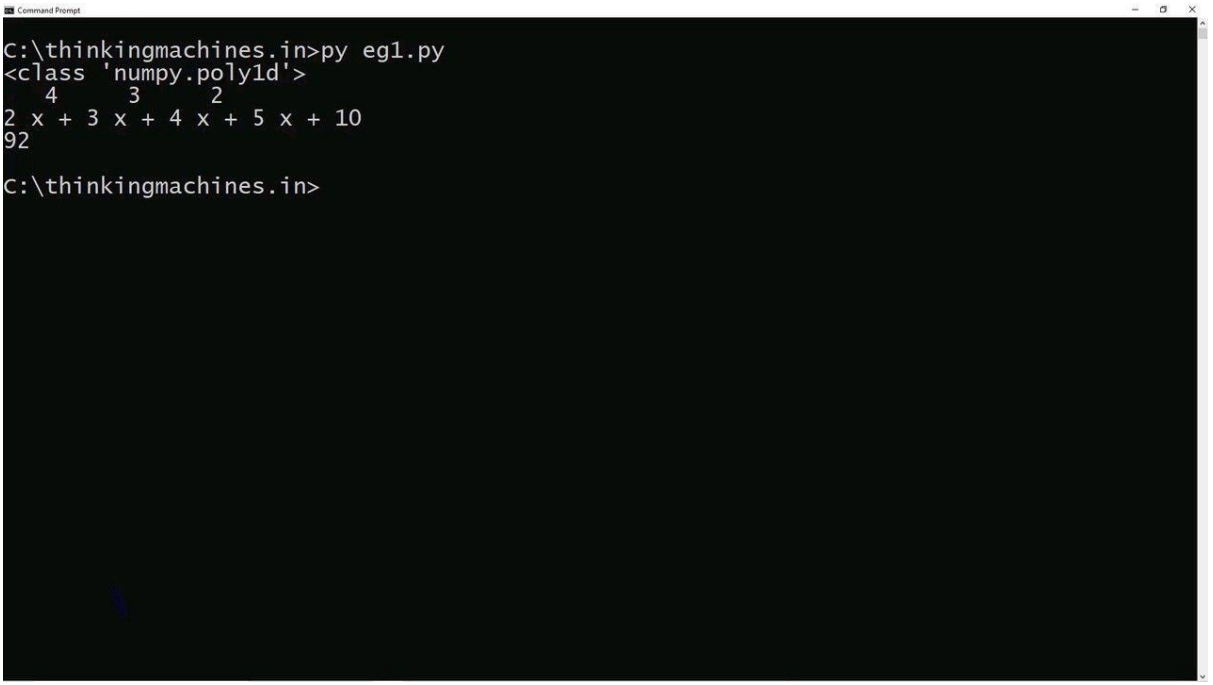
Ln 2, Col 1 100% Windows (CRLF) UTF-8

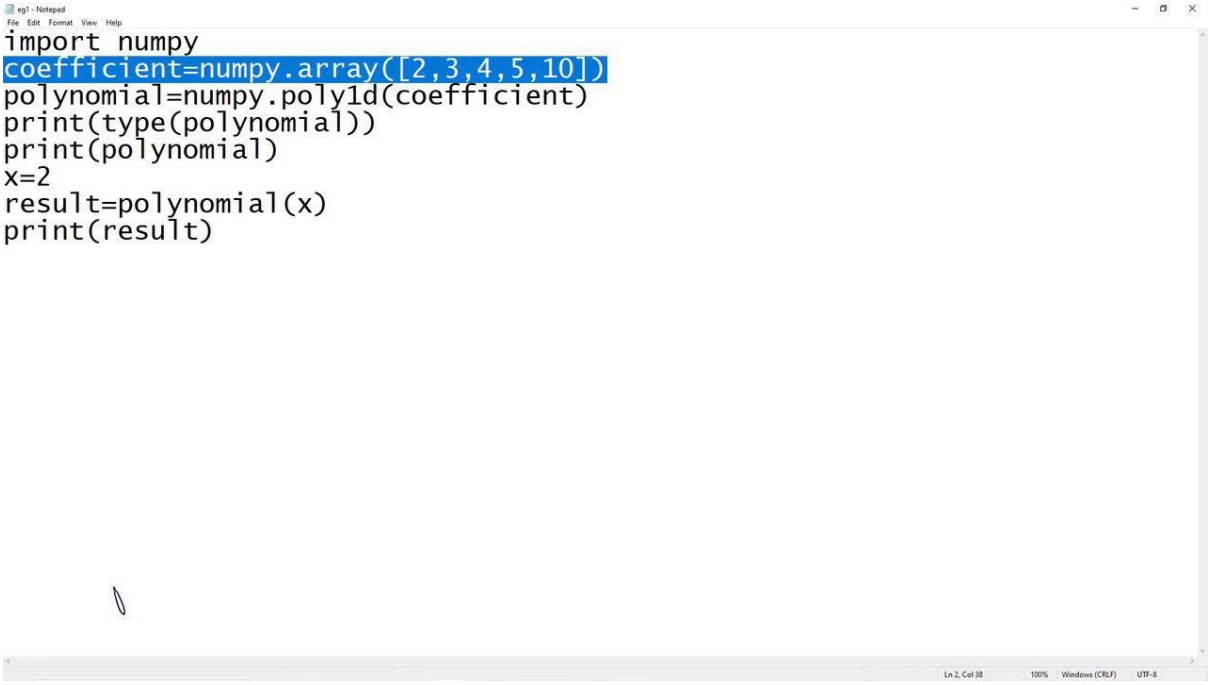
eg1 - Notepad

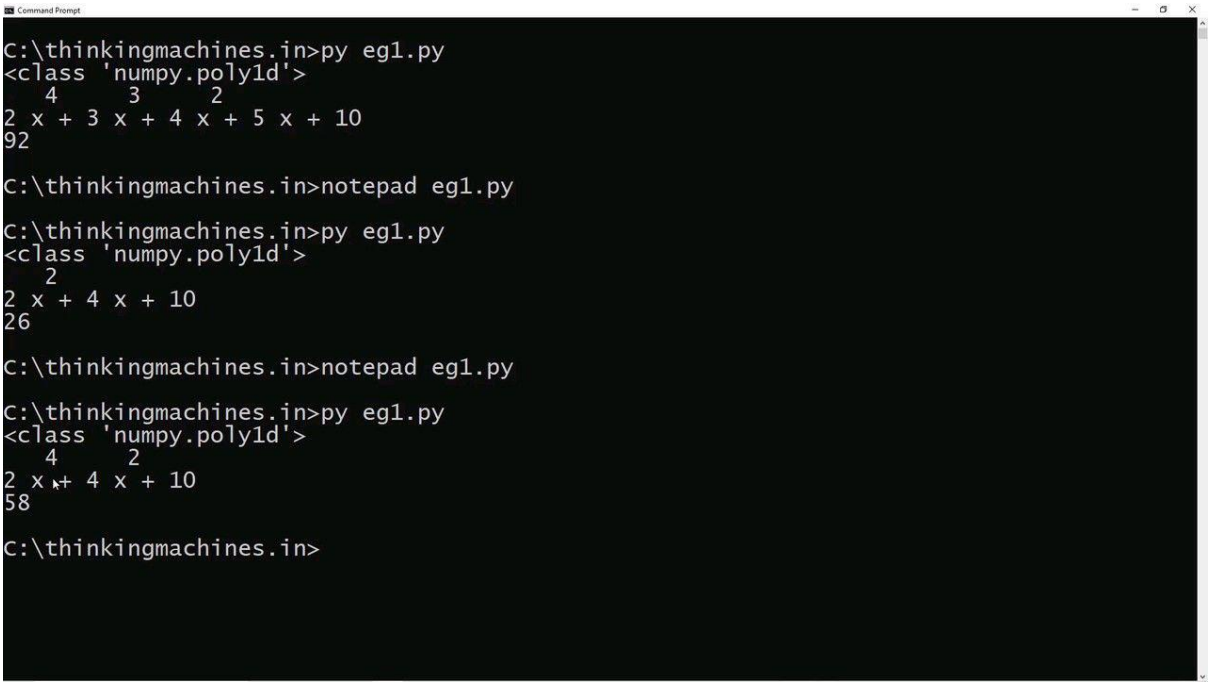
File Edit Format View Help

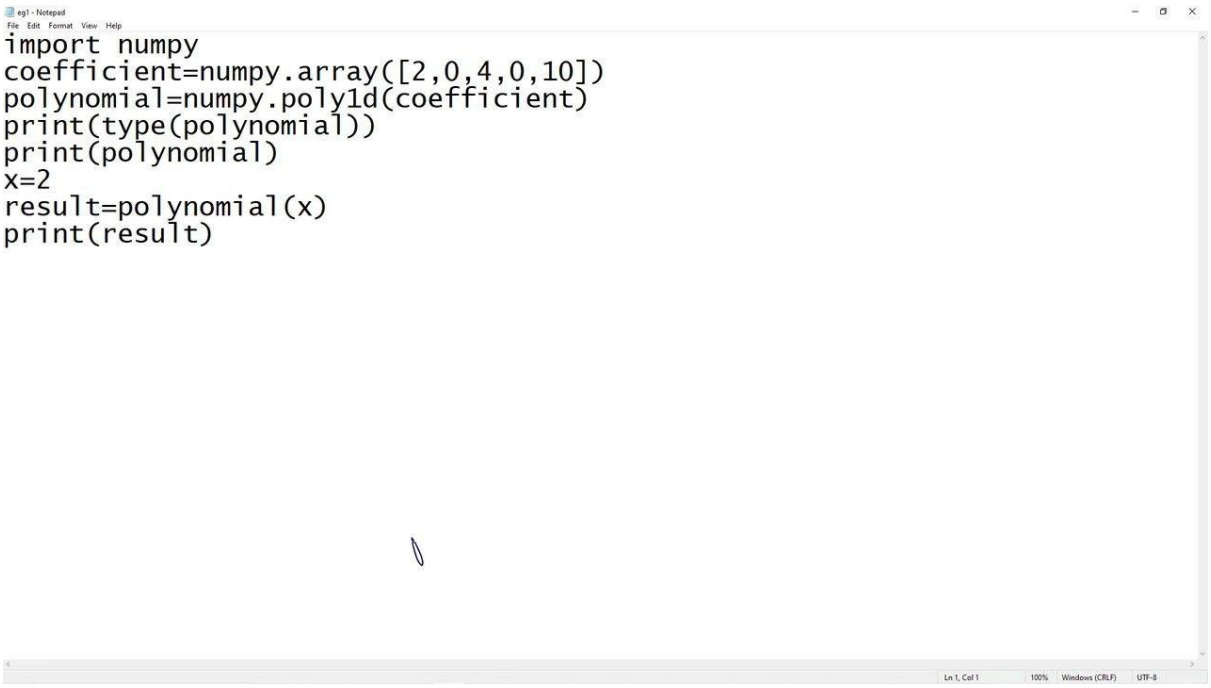
```
import numpy
coefficient=numpy.array([2,3,4,5,10])
polynomial=numpy.poly1d(coefficient)
print(type(polynomial))
print(polynomial)
x=2
result=polynomial(x)
print(result)
```

Ln 2, Col 38 100% Windows (CRLF) UTF-8


Command Prompt
C:\thinkingmachines.in>py eg1.py
<class 'numpy.poly1d'>
4 3 2
2 x + 3 x + 4 x + 5 x + 10
92
C:\thinkingmachines.in>


eg1 - Notepad
File Edit Format View Help
import numpy
coefficient=numpy.array([2,3,4,5,10])
polynomial=numpy.poly1d(coefficient)
print(type(polynomial))
print(polynomial)
x=2
result=polynomial(x)
print(result)
Ln 2, Col 38
100%
Windows (CRLF)
UTF-8


Command Prompt
C:\thinkingmachines.in>py eg1.py
<class 'numpy.poly1d'>
4 3 2
2 x + 3 x + 4 x + 5 x + 10
92
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
<class 'numpy.poly1d'>
2
2 x + 4 x + 10
26
C:\thinkingmachines.in>notepad eg1.py
C:\thinkingmachines.in>py eg1.py
<class 'numpy.poly1d'>
4 2
2 x + 4 x + 10
58
C:\thinkingmachines.in>


eg1 - Notepad
File Edit Format View Help
import numpy
coefficient=numpy.array([2,0,4,0,10])
polynomial=numpy.poly1d(coefficient)
print(type(polynomial))
print(polynomial)
x=2
result=polynomial(x)
print(result)
Ln 1, Col 1
100%
Windows (CRLF)
UTF-8