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Kelas G

Kodingan

```
from math import sqrt as sq
from random import randint

#No. 1.
def cetakSiku(x):
    a = 0
    while (a <= x):
        print(a * ('*'))
        a = a + 1
cetakSiku(5)

#No. 2.
def gambarlahPersegiEmpat(x, y):
    a = 0
    print(y * ('@'))
    while (a < x - 2):
        print('@' + (y - 2) * (' ') + '@')
        a = a + 1
    print(y * ('@'))
gambarlahPersegiEmpat(4, 5)

#No. 3. (a)
def jumlahHurufVokal(x):
    k = len(x)
    a = ('AEIOUaeiou')
    b = 0
    for c in x:
        if c in a:
            b = b + 1
    d = [k, b]
    print(d)
k=jumlahHurufVokal("Surakarta")
k
```

```python
# No. 3. (b)
def jumlahHurufKonsonan(x):
    k = len(x)
    a = ('AEIOUaeiou')
    b = 0
    for c in x:
        if c not in a:
            b = b + 1
    d = [k, b]
    print(d)
k = jumlahHurufKonsonan("Surakarta")
k

#No. 4
def rerata(b):
    x = len(b)
    y = 0
    z = 0
    while (y < x):
        z = z + b[y]
        y = y + 1
    print (z / x)
rerata([1,2,3,4,5])
g = [3,4,5,4,3,4,5,2,2,10,11,23]
rerata(g)

#No. 5
def apakahPrima(n):
    n = int(n)
    assert n >= 0
    primaKecil = [2, 3, 5, 7, 11]
    bukanPrKecil = [0, 1, 4, 6, 8, 9, 10]
    if n in primaKecil:
        return True
    elif n in bukanPrKecil:
        return False
    else:
        for i in range(2, int(sq(n)) + 1):
            if ((n % i) == 0):
                return False
            elif (i >= int(sq(n))):
                return True
            else:
                continue
apakahPrima(17)
apakahPrima(97)
apakahPrima(123)

#No. 6
def bilPrima():
    for i in range(2, 1000):
        q = True
        for y in range(2, i):
            if (i % y == 0):
                q = False
        if (q == True):
            print(i)
bilPrima()

#No. 7
def faktorPrima(w):
    w = int(w)
    assert w >= 0
    fakP = []
    q = 2
    while (q <= w):
        if (w % q == 0):
```

```
    while (q <= w):
        if (w % q == 0):
            w = w / q
            fakP.append(q)
        else:
            q = q + 1
    print(fakP)
faktorPrima(10)
faktorPrima(120)
faktorPrima(19)

#No. 8
def apakahTerkandung(a, b):
    a = a.lower()
    b = b.lower()
    if a in b:
        return True
    else:
        return False
h = "do"
k = "Indonesia tanah air beta"
apakahTerkandung(h,k)
apakahTerkandung("pusaka",k)

#No. 9
def tampilkan():
    for o in range(1, 100):
        if (o % 3 == 0):
            if (o % 5 == 0):
                print("Python UMS")
            else:
                print("Python")
        elif (o % 5 == 0):
            print("UMS")
        else:
            print(o)
tampilkan()

#No. 10
def selesaikanABC(r,s,t):
    r = float(r)
    s = float(s)
    t = float(t)
    D = (s ** 2) - (4 * r * t)
    if (D < 0):
        print("Determinannya negatif. Persamaan tidak mempunyai akar real")
    else:
        j1 = (-s + sq(D)) / (2 * r)
        j2 = (-s - sq(D)) / (2 * r)
        hasil = [j1, j2]
        print(hasil)
selesaikanABC(1,2,3)

#No. 11
def apakahKabisat(tahun):
    d = tahun
    if (d % 4 == 0):
        if (d % 100 == 0):
            if (d % 400 == 0):
                return True
            else:
                return False
        else:
            return True
    else:
        return False
apakahKabisat(1896)
apakahKabisat(1897)
```

```
166     apakahKabisat(1896)
167     apakahKabisat(1897)
168     apakahKabisat(1900)
169     apakahKabisat(2000)
170     apakahKabisat(2020)
171     apakahKabisat(2100)
172     #Hasil tidak ditampilkan karena nilai hanya dikembalikan dan tidak dicetak
173
174     #No. 12
175     def gameTebakAngka():
176         w = 1
177         m = randint(1, 101)
178         n = input("Masukkan tebakkan ke-" + str(w) + " : ")
179         n = int(n)
180         if (n == m):
181             print("Ya anda benar")
182         if (n < m):
183             print("Itu terlalu kecil")
184         elif (n > m):
185             print("Itu terlalu besar")
186         while (n != m):
187             w += 1
188             n = input("Masukkan tebakkan ke-" + str(w) + " : ")
189             n = int(n)
190             if (n < m):
191                 print("Itu terlalu kecil")
192             elif (n > m):
193                 print("Itu terlalu besar")
194             if (n == m):
195                 print("Ya anda benar")
196     gameTebakAngka()
197
198     #No. 13
199     def katakan(angka):
```

ASD_Modul01.py - E:/Prak_Algostruk/ASD_Modul01.py (3.6.5)

File Edit Format Run Options Window Help

```
#No. 13
def katakan(angka):
    ejaan = ["","Satu","Dua","Tiga","Empat","Lima","Enam","Tujuh","Delapan","Sem
    hasil = " "
    k = int(angka)
    if (k >= 0 and k <= 11) :
        hasil = hasil + ejaan[k]
    elif (k < 20) :
        hasil = katakan(k%10) + " Belas"
    elif (k < 100) :
        hasil = katakan(k/10) + " Puluh " + katakan(k%10)
    elif (k < 200) :
        hasil = "Seratus " + katakan(k-100)
    elif (k < 1000) :
        hasil = katakan(k/100) + " Ratus " + katakan(k%100)
    elif (k < 2000) :
        hasil = "Seribu " + katakan(k - 1000)
    elif (k < 10000) :
        hasil = katakan(k / 1000) + " Ribu " + katakan(k % 1000)
    elif (k < 20000) :
        hasil = "Sepuluh Ribu " + katakan(k - 10000)
    elif (k < 100000) :
        hasil = katakan(k / 10000) + " Puluh " + katakan(k % 10000)
    elif (k < 200000) :
        hasil = "Seratus Ribu " + katakan(k - 100000)
    elif (k < 1000000) :
        hasil = katakan(k / 100000) + " Ratus " + katakan(k % 100000)
    elif (k < 2000000) :
        hasil = "Satu Juta " + katakan(k - 1000000)
    elif (k < 10000000) :
        hasil = katakan(k / 1000000) + " Juta " + katakan(k % 1000000)
    elif (k == 10000000) :
        hasil = "Satu Milyar " + katakan(k % 10000000)
    else :
        hasil = "Angka hanya sampai satu milyar"
    return (hasil)
```

Ln: 33 Col: 29

Python 3.6.5 Shell

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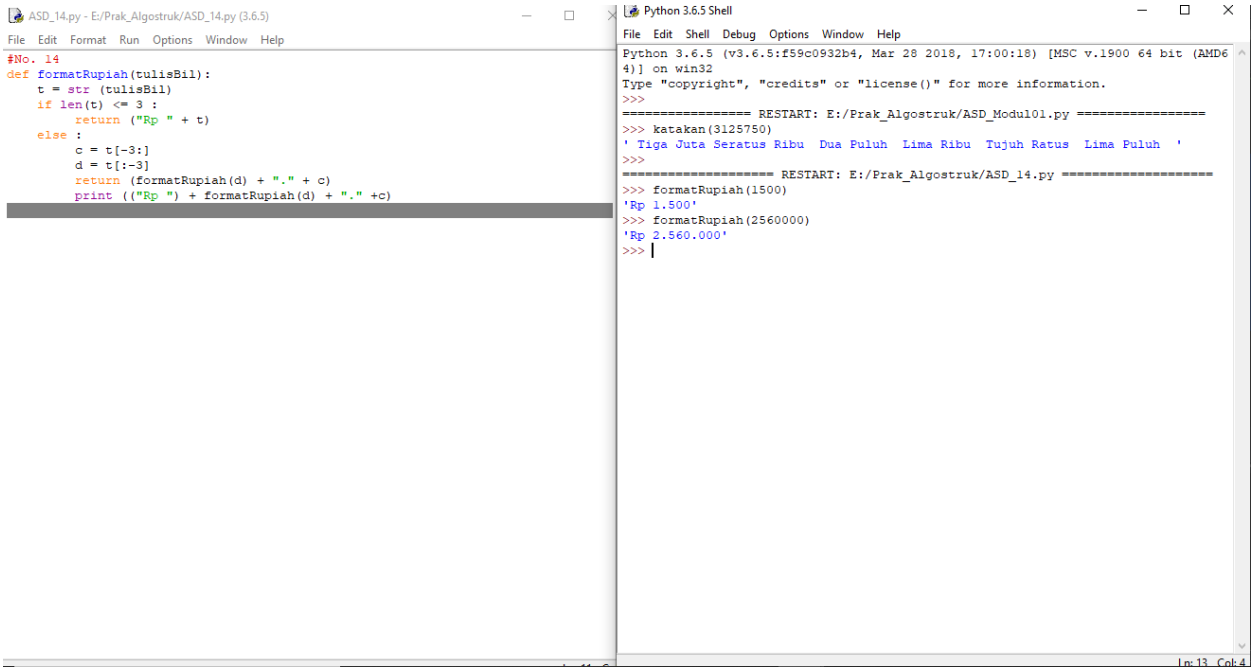
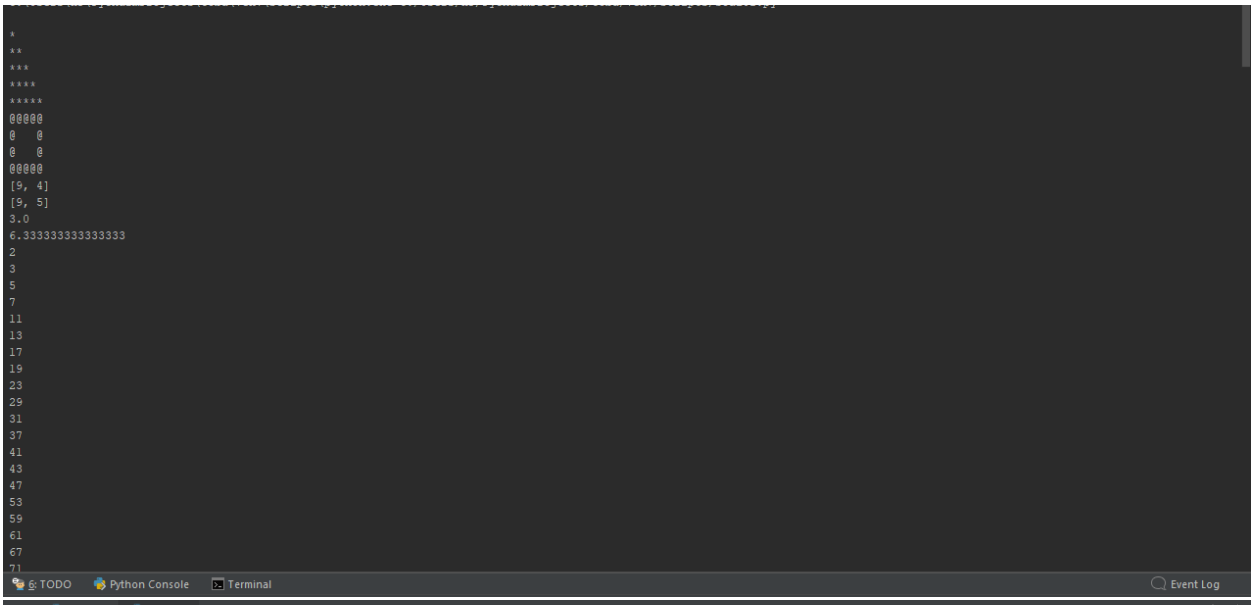
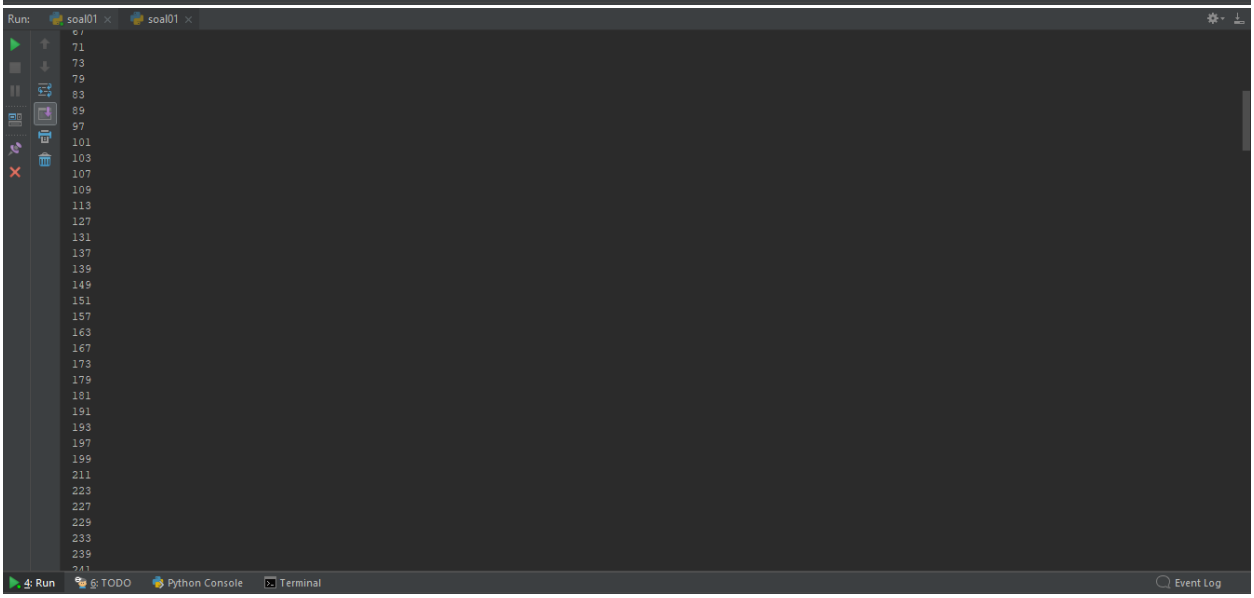
```
Python 3.6.5 (v3.6.5:f59c0932b4, Mar 28 2018, 17:00:18) [MSC v.1900 64 bit (AMD6
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:/Prak_Algostruk/ASD_Modul01.py ==========
>>> katakan(3125750)
' Tiga Juta Seratus Ribu  Dua Puluh  Lima Ribu  Tujuh Ratus  Lima Puluh  '
>>>
```

Ln: 7 Col: 4


ASD_14.py - E:/Prak_Algostruk/ASD_14.py (3.6.5)
File Edit Format Run Options Window Help
#No. 14
def formatRupiah(tulisBil):
t = str (tulisBil)
if len(t) <= 3 :
return ("Rp " + t)
else :
c = t[-3:]
d = t[:-3]
return (formatRupiah(d) + "." + c)
print (("Rp ") + formatRupiah(d) + "." +c)
Python 3.6.5 Shell
File Edit Shell Debug Options Window Help
Python 3.6.5 (v3.6.5:f59c0932b4, Mar 28 2018, 17:00:18) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:/Prak_Algostruk/ASD_Modul01.py ==========
>>> katakan(3125750)
' Tiga Juta Seratus Ribu Dua Puluh Lima Ribu Tujuh Ratus Lima Puluh '
>>>
========== RESTART: E:/Prak_Algostruk/ASD_14.py ==========
>>> formatRupiah(1500)
'Rp 1.500'
>>> formatRupiah(2560000)
'Rp 2.560.000'
>>>
Ln: 13 Col: 4

Output


*
**
***
****
*****
@@@@@
@ @
@ @
@@@@@
[9, 4]
[9, 5]
3.0
6.333333333333333
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
6: TODO
Python Console
Terminal
Event Log


Run:
soal01
soal01
67
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107
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113
127
131
137
139
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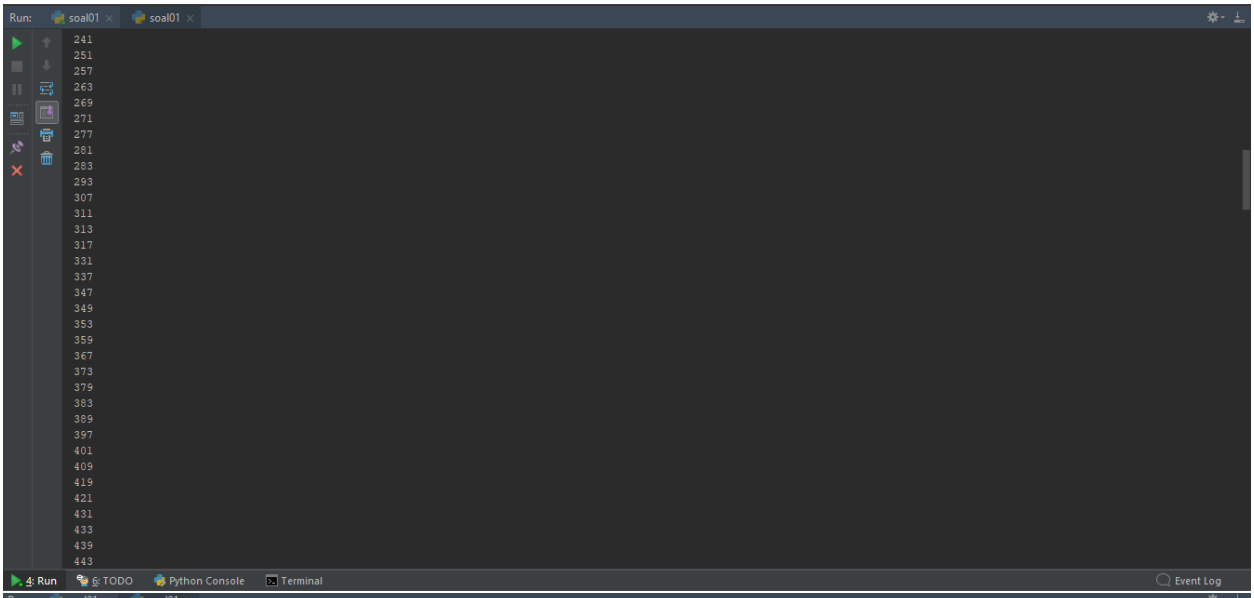
233
239
4: Run
6: TODO
Python Console
Terminal
Event Log


Run:
soal01
soal01
241
251
257
263
269
271
277
281
283
293
307
311
313
317
331
337
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421
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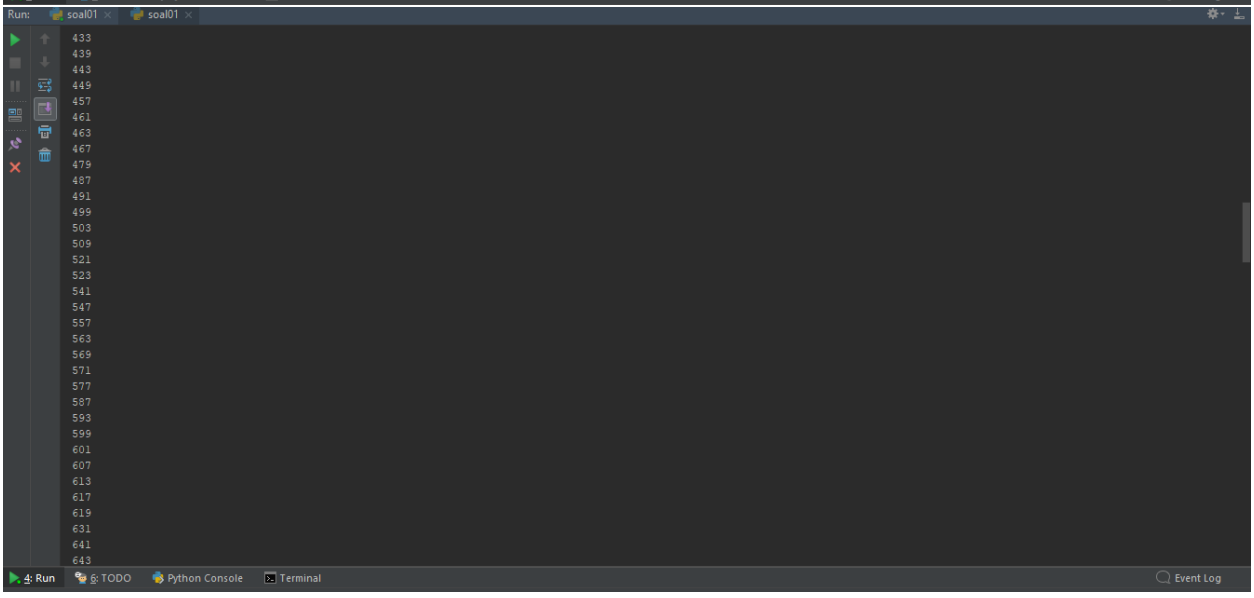
433
439
443
4: Run
6: TODO
Python Console
Terminal
Event Log


Run:
soal01
soal01
433
439
443
449
457
461
463
467
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487
491
499
503
509
521
523
541
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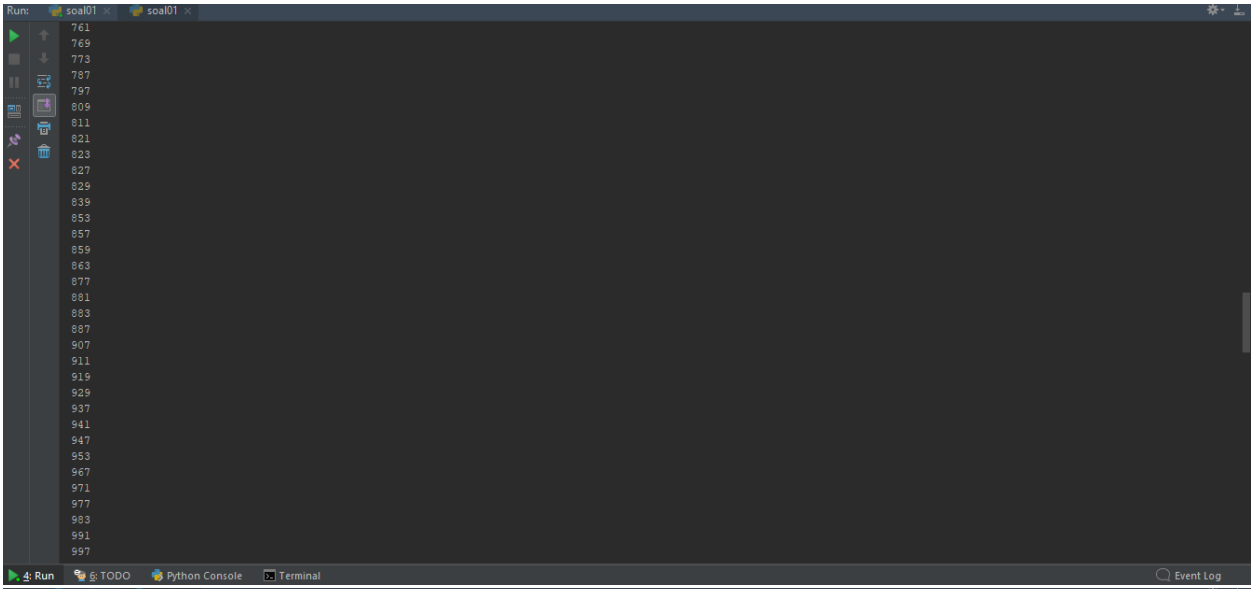
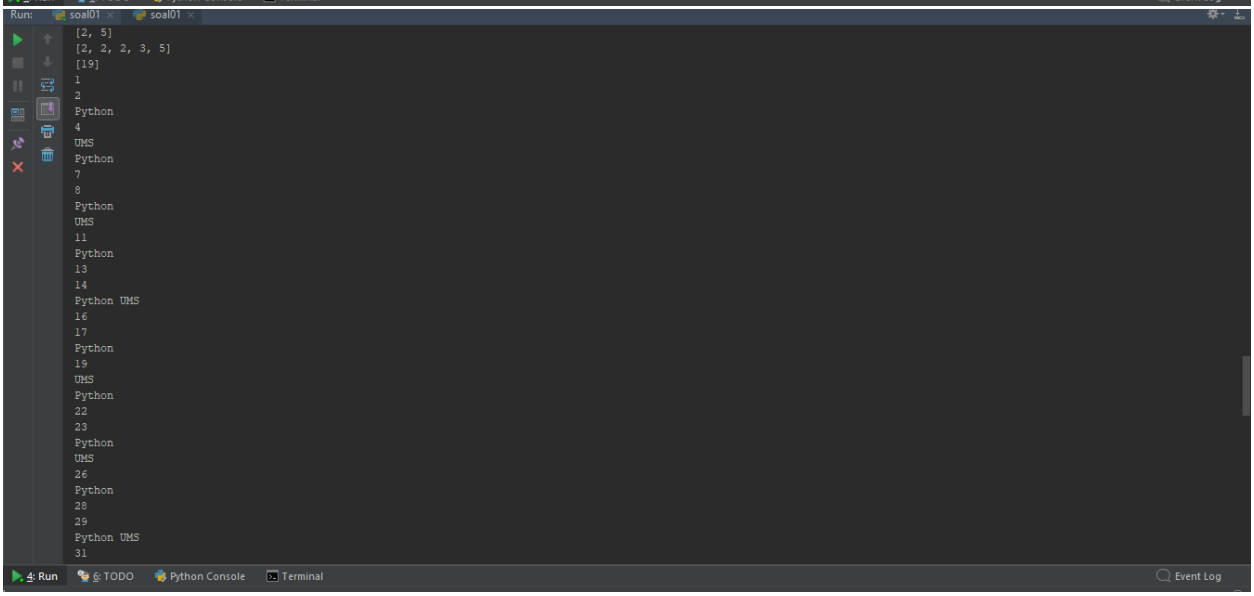
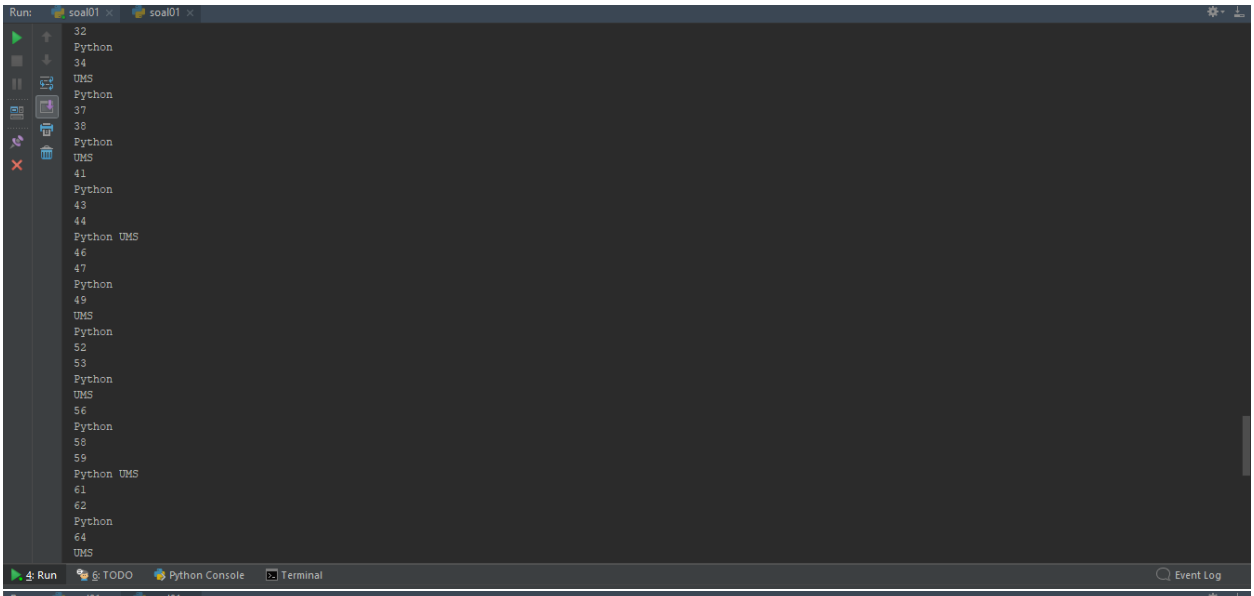
631
641
643
4: Run
6: TODO
Python Console
Terminal
Event Log


Run:
soal01
soal01
761
769
773
787
797
809
811
821
823
827
829
839
853
857
859
863
877
881
883
887
907
911
919
929
937
941
947
953
967
971
977
983
991
997
4: Run
6: TODO
Python Console
Terminal
Event Log


Run:
soal01
soal01
[2, 5]
[2, 2, 2, 3, 5]
[19]
1
2
Python
4
UMS
Python
7
8
Python
UMS
11
Python
13
14
Python UMS
16
17
Python
19
UMS
Python
22
23
Python
UMS
26
Python
28
29
Python UMS
31
4: Run
6: TODO
Python Console
Terminal
Event Log


Run:
soal01
soal01
32
Python
34
UMS
Python
37
38
Python
UMS
41
Python
43
44
Python UMS
46
47
Python
49
UMS
Python
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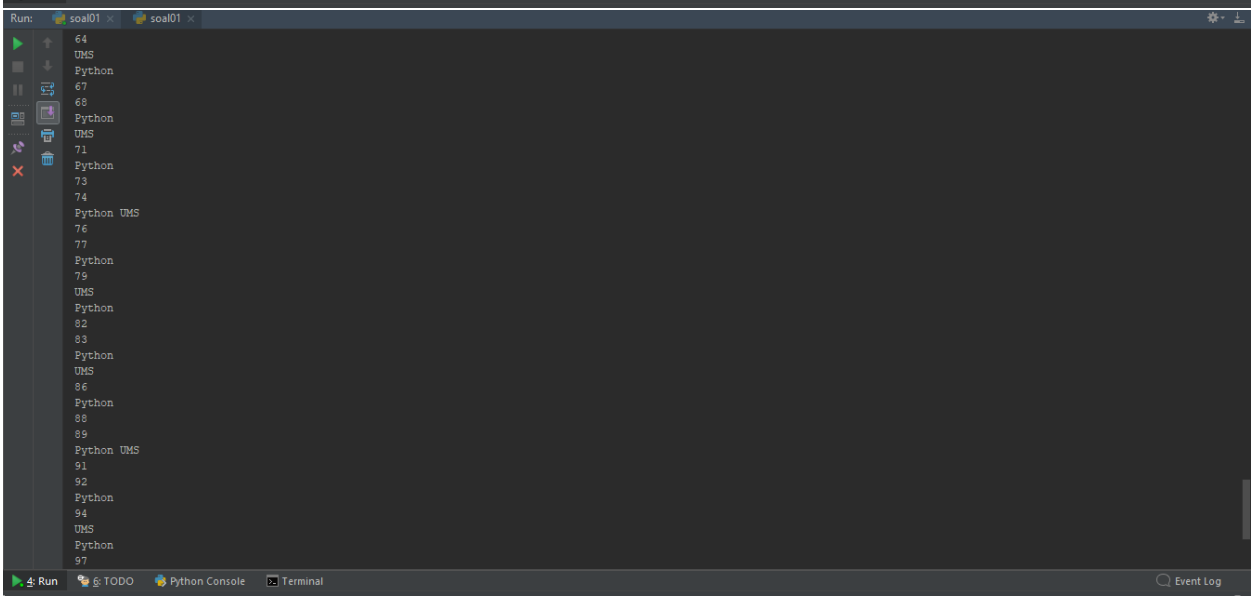
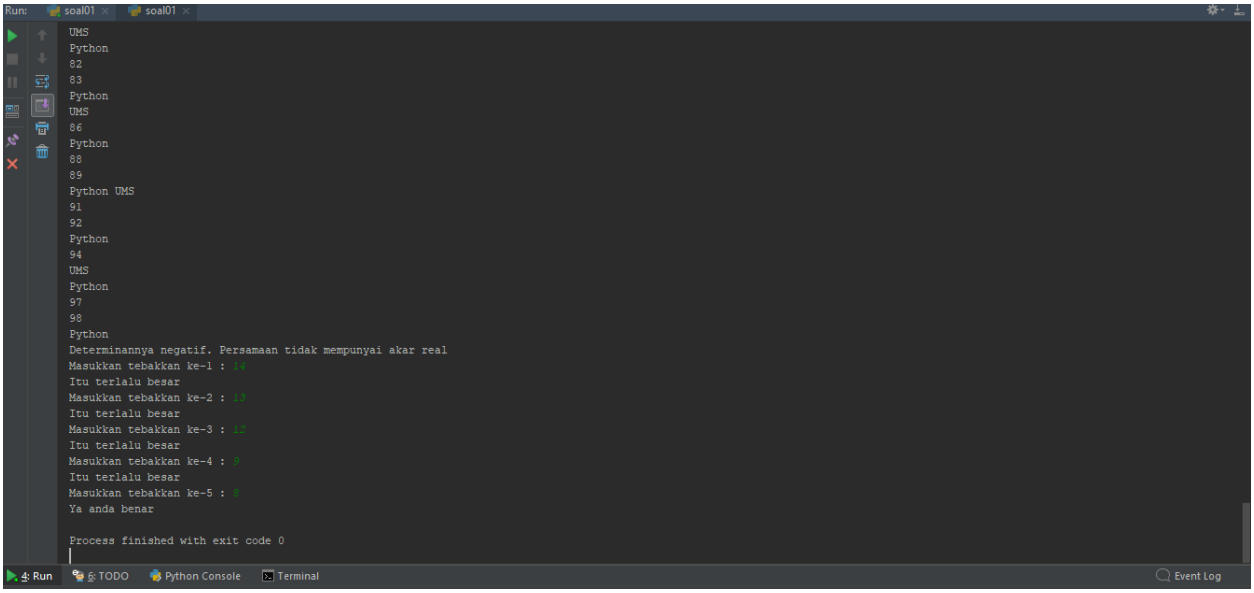
Python
UMS
56
Python
58
59
Python UMS
61
62
Python
64
UMS
4: Run
6: TODO
Python Console
Terminal
Event Log


Run:
soal01
soal01
64
UMS
Python
67
68
Python
UMS
71
Python
73
74
Python UMS
76
77
Python
79
UMS
Python
82
83
Python
UMS
86
Python
88
89
Python UMS
91
92
Python
94
UMS
Python
97
4: Run
6: TODO
Python Console
Terminal
Event Log


Run:
soal01
soal01
UMS
Python
82
83
Python
UMS
86
Python
88
89
Python UMS
91
92
Python
94
UMS
Python
97
98
Python
Determinannya negatif. Persamaan tidak mempunyai akar real
Masukkan tebakkan ke-1 : 14
Itu terlalu besar
Masukkan tebakkan ke-2 : 13
Itu terlalu besar
Masukkan tebakkan ke-3 : 12
Itu terlalu besar
Masukkan tebakkan ke-4 : 9
Itu terlalu besar
Masukkan tebakkan ke-5 : 8
Ya anda benar
Process finished with exit code 0
4: Run
6: TODO
Python Console
Terminal
Event Log