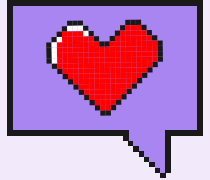
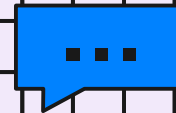


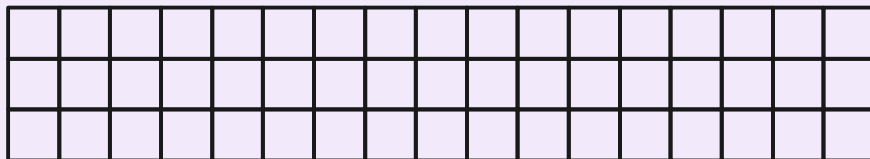
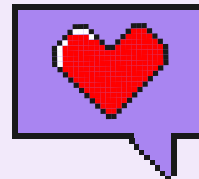
SNAKE GAME 2



Dwi Bagus Dermawan 1206220023
Easy Jovanie 1206220013
Yusril Ihsanurrijal 1206220003

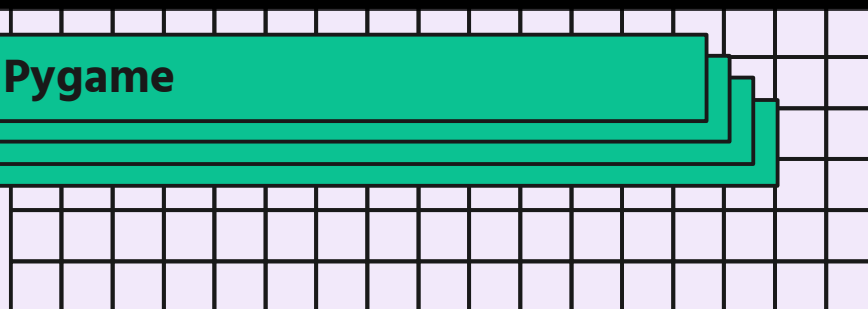
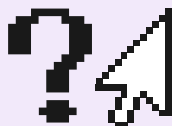
KELOMPOK 1



A screenshot of a terminal window with a yellow border. The terminal has tabs for 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL' (which is selected), and 'COMMENTS'. On the right side of the terminal, there are icons for 'Python', a document, and a trash can. The terminal text shows a PowerShell prompt 'PS D:\github\tes>' followed by the command 'pip install pygame'. The output is 'Requirement already satisfied: pygame in c:\users\dwibagusd\appdata\local\programs\python\python310\lib\site-packages (2.1.2)'. The prompt is repeated at the end of the line. The terminal is set against a dark background with light-colored text.

```
PS D:\github\tes> pip install pygame
Requirement already satisfied: pygame in c:\users\dwibagusd\appdata\local\programs\python\python310\lib\site-packages (2.1.2)
PS D:\github\tes>
```

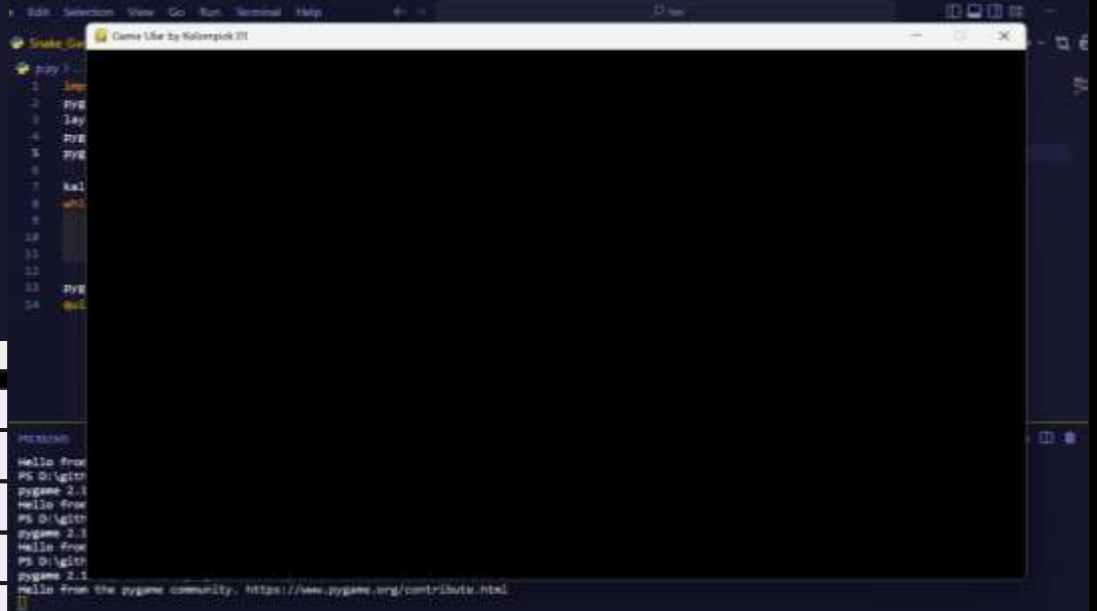
Install Pygame



Membuat Layar(display)

```
1 import pygame
2 pygame.init()
3 layar=pygame.display.set_mode((1000,600))
4 pygame.display.update()
5 pygame.display.set_caption('Game Ular by Kelompok 01')
6
7 kalah=False
8 while not kalah:
9     for event in pygame.event.get():
10         if event.type==pygame.QUIT:
11             kalah=True
12
13 pygame.quit()
14 quit()
```

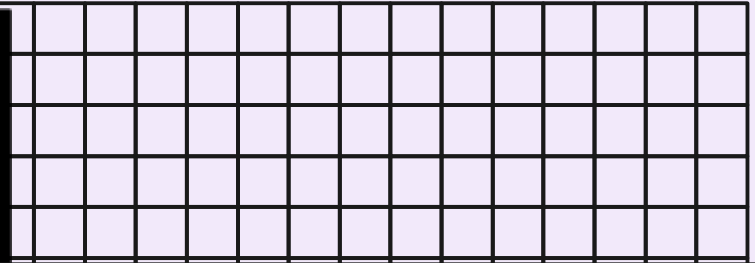
Output



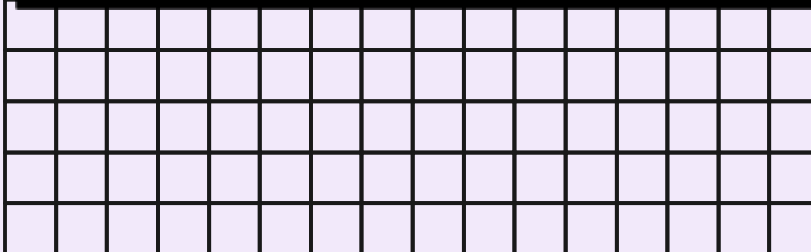
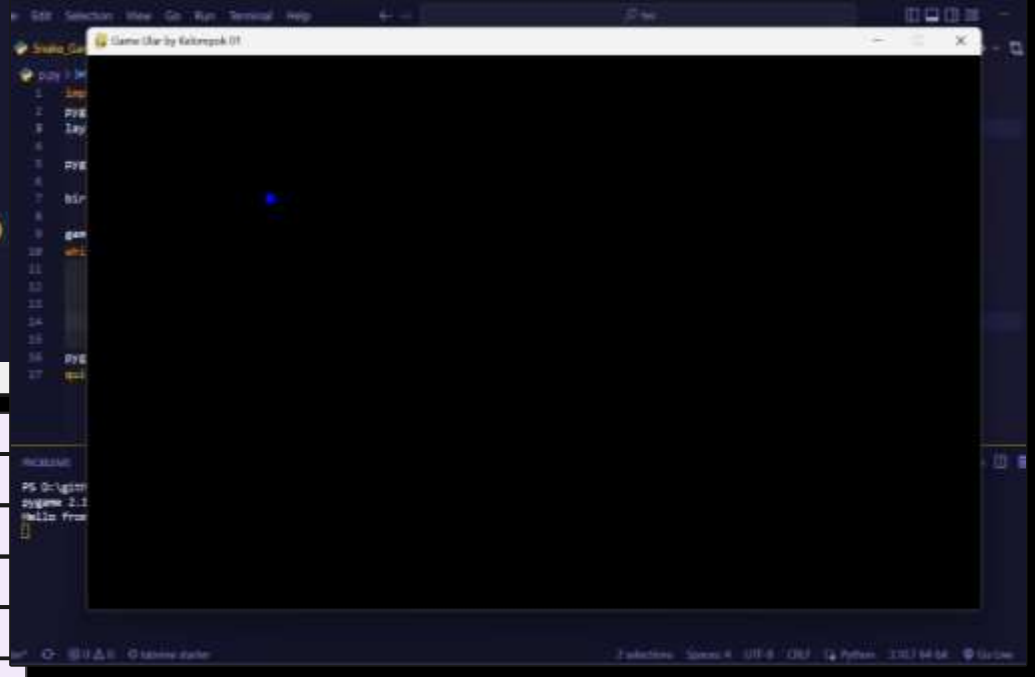
Membuat Kepala Ular



```
1 import pygame
2 pygame.init()
3 layar=pygame.display.set_mode((1000,600))
4
5 pygame.display.set_caption('Game Ular by Kelompok 01')
6
7 biru=(0,0,255)
8
9 game_over=False
10 while not game_over:
11     for event in pygame.event.get():
12         if event.type==pygame.QUIT:
13             game_over=True
14     pygame.draw.rect(layar,biru,[200,150,10,10])
15     pygame.display.update()
16 pygame.quit()
17 quit()
```

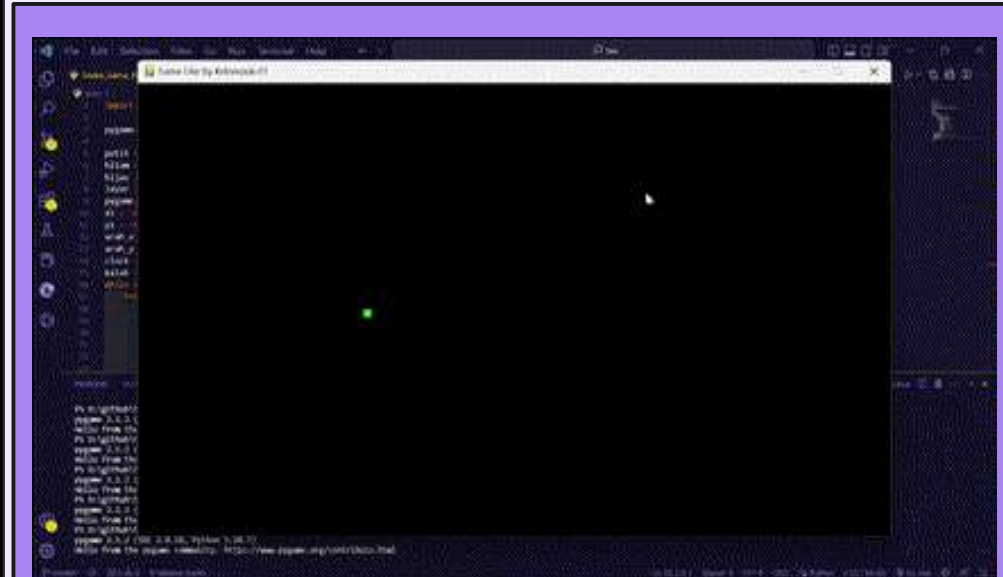


Output



Membuat ular bergerak _ □ ×

```
1 import pygame
2
3 pygame.init()
4
5 putih = (255, 255, 255)
6 hitam = (0, 0, 0)
7 hijau = (0, 255, 0)
8 layar = pygame.display.set_mode((1000, 600))
9 pygame.display.set_caption('Game Ular by Kelompok 01')
10 x1 = 300
11 y1 = 300
12 arah_x = 0
13 arah_y = 0
14 clock = pygame.time.Clock()
15 kalah = False
16 while not kalah:
17     for event in pygame.event.get():
18         if event.type == pygame.QUIT:
19             kalah = True
20         if event.type == pygame.KEYDOWN:
21             if event.key == pygame.K_LEFT:
22                 arah_x = -10
23                 arah_y = 0
24             elif event.key == pygame.K_RIGHT:
25                 arah_x = 10
26                 arah_y = 0
27             elif event.key == pygame.K_UP:
28                 arah_x = 0
29                 arah_y = -10
30             elif event.key == pygame.K_DOWN:
31                 arah_x = 0
32                 arah_y = 10
33
34         x1 += arah_x
35         y1 += arah_y
36         layar.fill(hitam)
37         pygame.draw.rect(layar, hijau, [x1, y1, 10, 10])
38         pygame.display.update()
39         clock.tick(30)
```



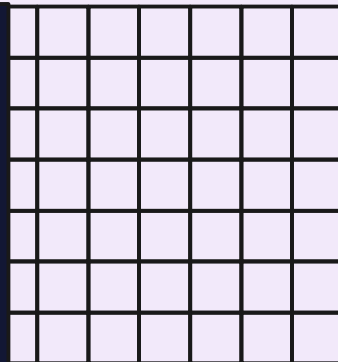
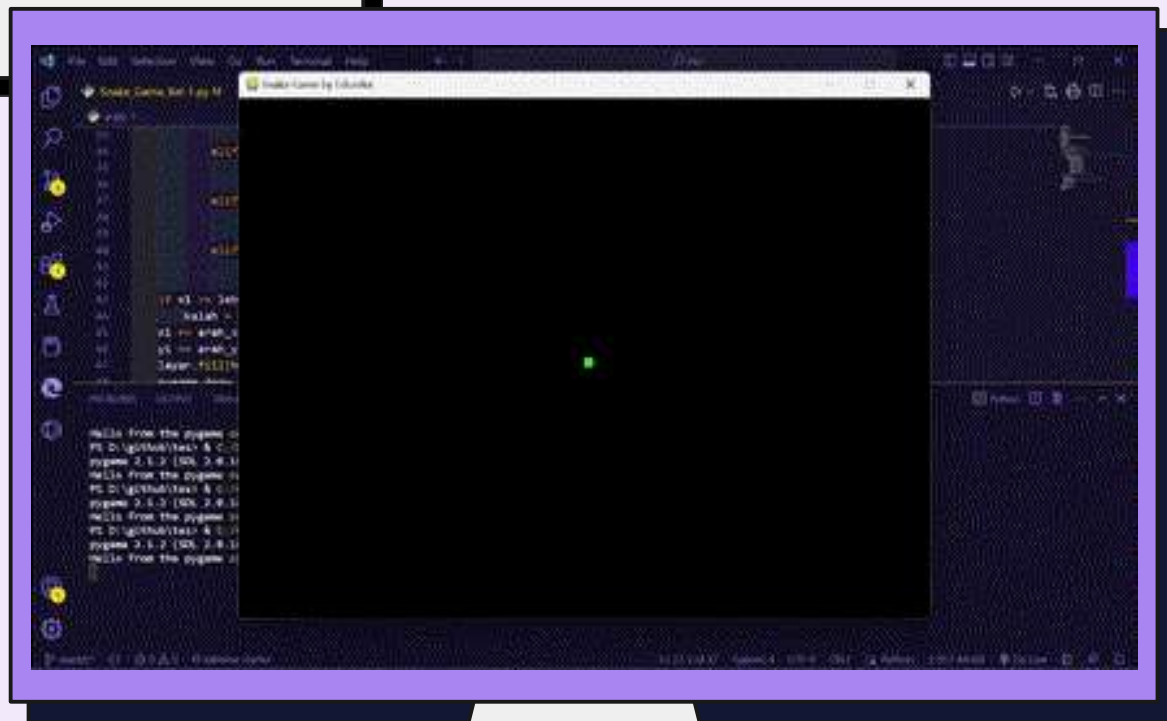
Membuat Batas Permainan _ □ ×

```
1 import pygame
2 import time
3 pygame.init()
4
5 hijau = (0, 255, 0)
6 hitam = (0, 0, 0)
7 merah = (255, 0, 0)
8 lebar = 800
9 tinggi = 600
10 layar = pygame.display.set_mode((lebar, tinggi))
11 pygame.display.set_caption('Snake Game by Edureka')
12 kalah = False
13 x1 = lebar/2
14 y1 = tinggi/2
15 kepala_kotak=10
16 arah_x = 0
17 arah_y = 0
18 clock = pygame.time.Clock()
19 speed=30
20 font_style = pygame.font.SysFont(None, 50)
21
22 def pesan(psn,warna):
23     psn = font_style.render(psn, True, warna)
24     layar.blit(psn, [lebar/2, tinggi/2])
25
26 while not kalah:
27     for event in pygame.event.get():
28         if event.type == pygame.QUIT:
29             game_over = True
30         if event.type == pygame.KEYDOWN:
31             if event.key == pygame.K_LEFT:
32                 arah_x = -kepala_kotak
```

Membuat Batas Permainan _ □ ×

```
33         arah_y = 0
34         elif event.key == pygame.K_RIGHT:
35             arah_x = kepala_kotak
36             arah_y = 0
37         elif event.key == pygame.K_UP:
38             arah_y = -kepala_kotak
39             arah_x = 0
40         elif event.key == pygame.K_DOWN:
41             arah_y = kepala_kotak
42             arah_x = 0
43     if x1 >= lebar or x1 < 0 or y1 >= tinggi or y1 < 0:
44         kalah = True
45     x1 += arah_x
46     y1 += arah_y
47     layar.fill(hitam)
48     pygame.draw.rect(layar, hijau, [x1, y1, kepala_kotak, kepala_kotak])
49     pygame.display.update()
50     clock.tick(speed)
51
52 pesan("Kalah!",merah)
53 pygame.display.update()
54 time.sleep(2)
55 pygame.quit()
56 quit()
```

Output

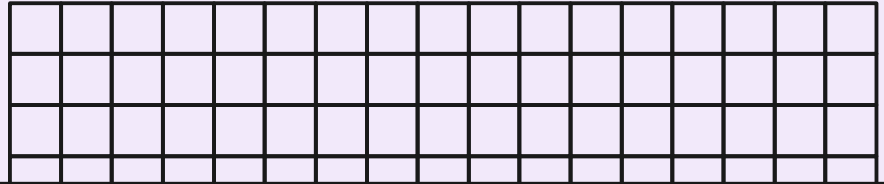


Menambah Makanan _ 0 x

```

23 def gameloop():
24     kalah = False
25     keluar = False
26     x1 = lebar / 2
27     y1 = tinggi / 2
28     arah_x = 0
29     arah_y = 0
30     makanx = round(random.randrange(0,lebar -kepala_kotak) / 10.0) * 10.0
31     makany = round(random.randrange(0, lebar - kepala_kotak) / 10.0) * 10.0
32
33     while not kalah:
34         while keluar == True:
35             layar.fill(putih)
36             pesan("Game Over! Tekan 'spasi'-lanjut! Tekan 'Esc'-keluar", merah)
37             pygame.display.update()
38             for event in pygame.event.get():
39                 if event.type == pygame.KEYDOWN:
40                     if event.key == pygame.K_ESCAPE:
41                         kalah = True
42                         keluar = False
43                     if event.key == pygame.K_SPACE:
44                         gameloop()
45             for event in pygame.event.get():
46                 if event.type == pygame.QUIT:
47                     kalah = True
48                 if event.type == pygame.KEYDOWN:
49                     if event.key == pygame.K_LEFT:
50                         arah_x = -kepala_kotak
51                         arah_y = 0
52                     elif event.key == pygame.K_RIGHT:
53                         arah_x = kepala_kotak

```



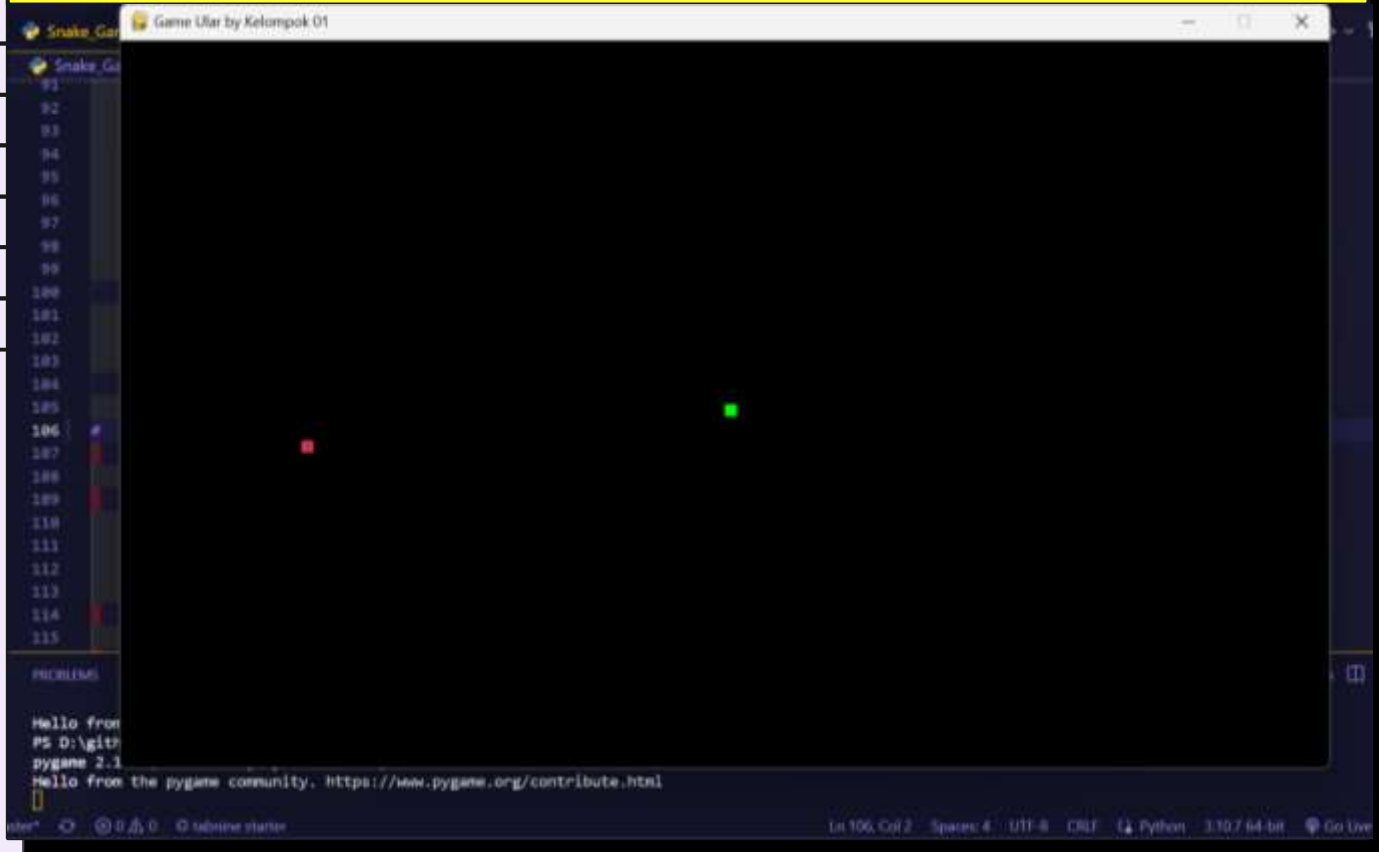
Menambah Makanan _ 0 x

```

54         arah_y = 0
55         elif event.key == pygame.K_UP:
56             arah_y = -kepala_kotak
57             arah_x = 0
58         elif event.key == pygame.K_DOWN:
59             arah_y = kepala_kotak
60             arah_x = 0
61     if x1 >= lebar or x1 < 0 or y1 >= tinggi or y1 < 0:
62         keluar = True
63     x1 += arah_x
64     y1 += arah_y
65     layar.fill(putih)
66     pygame.draw.rect(layar, merah, [makanx, makany, kepala_kotak, kepala_kotak])
67     pygame.draw.rect(layar, hitam, [x1, y1, kepala_kotak, kepala_kotak])
68     pygame.display.update()
69     if x1 == makanx and y1 == makany:
70         makan_x = round(random.randrange(0, lebar - kepala_kotak) / 10.0) * 10.0
71         makan_y = round(random.randrange(0, tinggi - kepala_kotak) / 10.0) * 10.0
72         print("amm!!")
73         clock.tick(speed)
74     pygame.quit()
75     quit()
76     gameloop()

```


Output



```
Snake_Ular by Kelompok 01
91
92
93
94
95
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97
98
99
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101
102
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Hello from
PS D:\gith
pygame 2.1
Hello from the pygame community. https://www.pygame.org/contribute.html

Ln 106, Col 2  Spaces: 4  UTF-8  CRLF  Python 3.10.7 64-bit  Go Live
```

Menambah Panjang Ular

_ 0 x

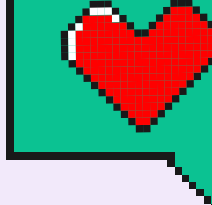
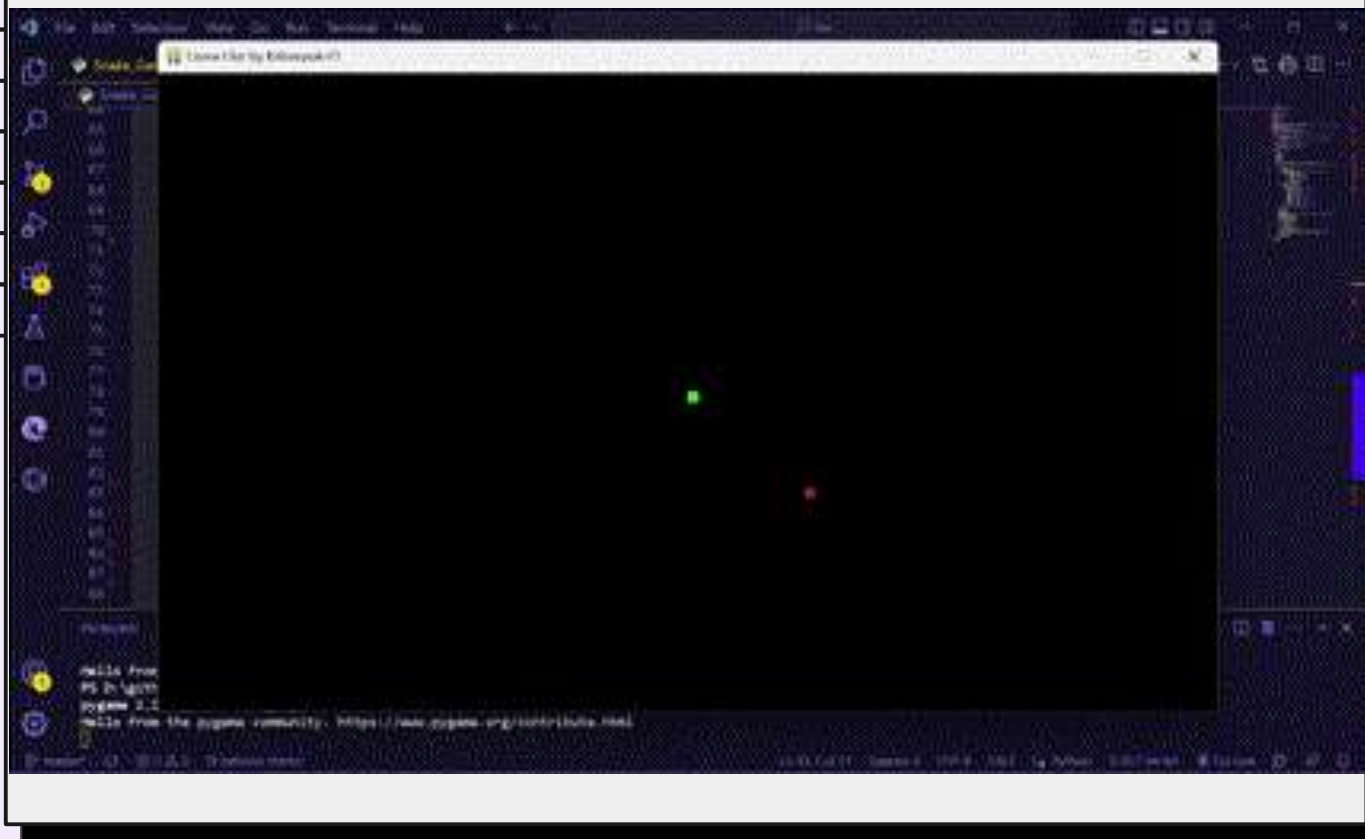
```
21 #fungsi(function) menambah panjang ular
22 def our_snake(kepala_kotak, list_ular):
23     for x in list_ular:
24         pygame.draw.rect(layar, hijau, [x[0], x[1], kepala_kotak, kepala_kotak])
25
26 #fungsi(function) memberi pesan ketika game over
27 def pesan(psn, warna):
28     komen = font_style.render(psn, True, warna)
29     layar.blit(komen, [lebar / 6, tinggi / 3])
30
31 def gameLoop(): #mengulangi permainan
32     kalah = False
33     keluar = False
34     x1 = lebar / 2
35     y1 = tinggi / 2
36     arah_x = 0
37     arah_y = 0
38     badan = []
39     panjang_ular = 1
40     makan_x = round(random.randrange(0, lebar - kepala_kotak) / 10.0) + 10.0
41     makan_y = round(random.randrange(0, tinggi - kepala_kotak) / 10.0) + 10.0
42
43     while not kalah:
44         while keluar == True:
45             layar.fill(hitam)
46             pesan("Game Over! Tekan 'spasi'-lanjut! Tekan 'Esc'-keluar", putih)
47             pygame.display.update()
48             for event in pygame.event.get():
49                 if event.type == pygame.KEYDOWN:
50                     if event.key == pygame.K_ESCAPE:
51                         kalah = True
52                         keluar = False
```

Menambah Panjang Ular

_ 0 x

```
if x1 >= lebar or x1 < 0 or y1 >= tinggi or y1 < 0:
    keluar = True
x1 += arah_x
y1 += arah_y
layar.fill(hitam)
pygame.draw.rect(layar, merah, [makan_x, makan_y, kepala_kotak, kepala_kotak])
anggota_badan = []
anggota_badan.append(x1)
anggota_badan.append(y1)
badan.append(anggota_badan)
if len(badan) > panjang_ular:
    del badan[0]
for x in badan[:-1]:
    if x == anggota_badan:
        keluar = True
our_snake(kepala_kotak, badan)
pygame.display.update()
if x1 == makan_x and y1 == makan_y:
    makan_x = round(random.randrange(0, lebar - kepala_kotak) / 10.0) + 10.0
    makan_y = round(random.randrange(0, tinggi - kepala_kotak) / 10.0) + 10.0
    panjang_ular += 1
clock.tick(speed)
pygame.quit()
quit()
gameLoop()
```

Output

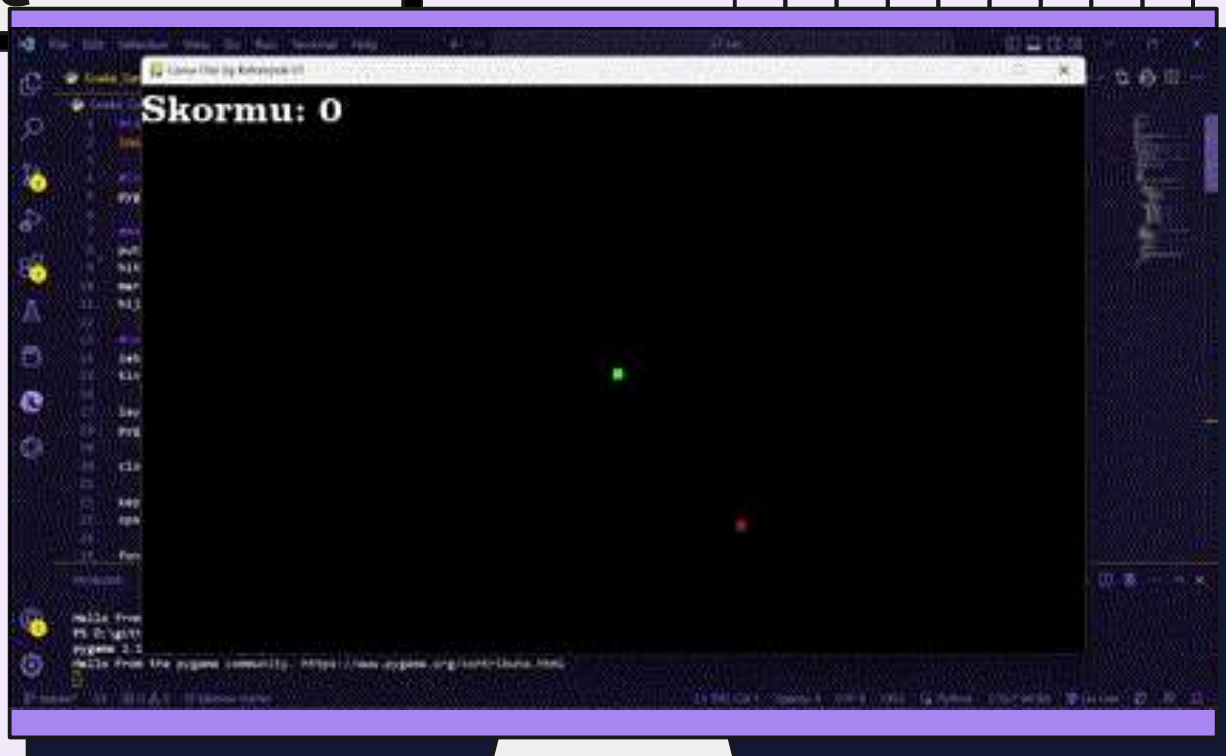


Membuat Perhitungan Skor



```
28 #membuat fungsi(function) perhitungan skor
29 def skormu(skor):
30     hitung_skor = skor_font.render("Skormu: " + str(skor), True, putih)
31     layar.blit(hitung_skor, [0, 0])
32
55     while not kalah:
56 >         while keluar == True:---
68 >         for event in pygame.event.get():---
84             if x1 >= lebar or x1 < 0 or y1 >= tinggi or y1 < 0:
85                 keluar = True
86                 x1 += arah_x
87                 y1 += arah_y
88                 layar.fill(hitam)
89                 pygame.draw.rect(layar, merah, [makan_x, makan_y, kepala_kotak, kepala_kotak])
90                 anggota_badan = []
91                 anggota_badan.append(x1)
92                 anggota_badan.append(y1)
93                 badan.append(anggota_badan)
94                 if len(badan) > panjang_ular:
95                     del badan[0]
96                 for x in badan[:-1]:
97                     if x == anggota_badan:
98                         keluar = True
99                 our_snake(kepala_kotak, badan)
100                 skormu(panjang_ular - 1)
101
102     pygame.display.update()
```

Output





**Terima
Kasih**