

Program Loop dan Mirroring

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Catatan: dalam program ini tidak digunakan “\” untuk memisahkan baris, namun program dapat dijalankan sesuai seharusnya.

SOURCE CODE

```
TOP_LEFT = "┌"
TOP_CENTER = "─"
TOP_RIGHT = "┐"

HORIZONTAL_LINE = "─"
MIDDLE_LEFT = "├"
MIDDLE_CENTER = "┼"
MIDDLE_RIGHT = "┤"
VERTICAL_LINE = "│"

BOTTOM_LEFT = "└"
BOTTOM_CENTER = "─"
BOTTOM_RIGHT = "┘"

SYMBOL_1 = "□"
SYMBOL_2 = "“"
SYMBOL_3 = "■"

LIMIT = 15 # membatasi bangun supaya tidak terlalu besar
MULTIPLIER = 2 # pengali sederhana untuk mengatur lebar bangun

def draw_top(size): # menggambar bagian atas
    print(TOP_LEFT + HORIZONTAL_LINE*size*MULTIPLIER +
          TOP_CENTER + HORIZONTAL_LINE*size*MULTIPLIER + TOP_RIGHT)
```

```

def draw_main(size): # menggambar bagian tengah
    list1 = list(range(0, size + 1))
    list2 = list(range(size - 1, -1, -1))
    for line in (list1+list2):
        if line == size:
            print(MIDDLE_LEFT + HORIZONTAL_LINE*size*MULTIPLIER +
                  MIDDLE_CENTER + HORIZONTAL_LINE*size*MULTIPLIER + MIDDLE_RIGHT)
        else:
            print(VERTICAL_LINE + SYMBOL_1*((size-line)*MULTIPLIER-1) + SYMBOL_3 +
                  SYMBOL_2*line*MULTIPLIER + VERTICAL_LINE +
                  SYMBOL_2*((size-line)*MULTIPLIER-1) + SYMBOL_3 +
                  SYMBOL_1*(line*MULTIPLIER) + VERTICAL_LINE)

def draw_bottom(size): # menggambar bagian bawah
    print(BOTTOM_LEFT + HORIZONTAL_LINE*size*MULTIPLIER +
          BOTTOM_CENTER + HORIZONTAL_LINE*size*MULTIPLIER + BOTTOM_RIGHT)

def draw_shape(size): # menggambar bangun
    draw_top(size)
    draw_main(size)
    draw_bottom(size)

def input_size(): # melakukan input
    size = int(input("Input a positive integer: "))
    if (size < 1):
        return 1
    elif (size > LIMIT):
        return LIMIT
    else:
        return size

size = input_size()
draw_shape(size)

```


HASIL

Bangun simetri atas bawah

Input = 0

Input dinaikkan menjadi 1

```
D:\Ivan\Kuliah\Tingkat 2\Sem 1\Pemrograman\Python>py mirror.py
Input a positive integer: 0
```



Input = 100

Input diturunkan menjadi 15 (LIMIT)

[illegible]

Input = 10

```
D:\Ivan\Kuliah\Tingkat 2\Sem 1\Pemrograman\Python>py mirror.py
Input a positive integer: 10
```

Input = 4

```
D:\Ivan\Kuliah\Tingkat 2\Sem 1\Pemrograman\Python>py mirror.py
Input a positive integer: 4
```

o o o o o o ■	■
o o o o o ■	■ o o
o o o ■	■ o o o o
o ■	■ o o o o o o
o ■	■ o o o o o o
o o o ■	■ o o o o
o o o o o ■	■ o o o
o o o o o o o ■	■