## Program Loop dan Mirroring

Christopher Ivan Gunardi - 18119025

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

## SOURCE CODE

```
TOP LEFT = "┌"
TOP_CENTER = "T"
TOP_RIGHT = "¬"
HORIZONTAL LINE = "-"
MIDDLE LEFT = " ├-"
MIDDLE CENTER = "+"
MIDDLE RIGHT = "┪"
VERTICAL LINE = " |"
BOTTOM_LEFT = " L"
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

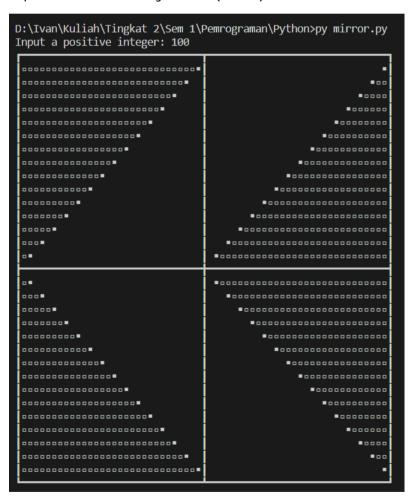
Input = 0

Input dinaikkan menjadi 1

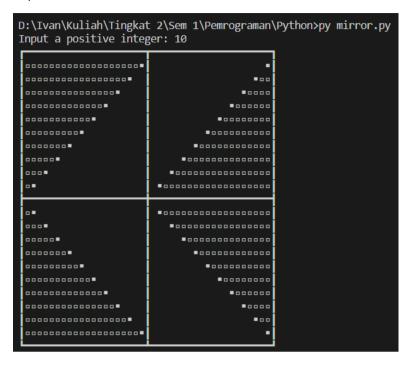
D:\Ivan\Kuliah\Tingkat 2\Sem 1\Pemrograman\Python>py mirror.py
Input a positive integer: 0

Input = 100

Input diturunkan menjadi 15 (LIMIT)



Input = 10



## Input = 4

