

셀 실행 | 아래에서 실행 | 디버그 셀

```

1  # %%
2
3  """
4  area_rectangle, area_right_triangle, area_ellipse 함수들에서
5  예외 발생 시 0이하의 값은 입력할 수 없습니다를 출력하도록 변경!
6  """
7
8  import figure
9
10 myline = figure.line(10, 20)
11
12 width, height = myline.get_length()
13 try :
14     rectangle = figure.area_rectangle(width, height)
15     print(rectangle)
16 except ValueError :
17     print("please input positive number for width and height")
18
19
20 myline.set_length(20, 30)
21 width, height = myline.get_length()
22
23 try :
24     right_triangle = figure.area_right_triangle(width, height)
25     print(right_triangle)
26 except ValueError :
27     print("please input positive number for width and height")
28
29
30 myline.set_length(30, 40)
31 width, height = myline.get_length()
32 try :
33     ellipse = figure.area_ellipse(width, height)
34     print(ellipse)
35 except ValueError :
36     print("please input positive number for width and height")

```

```

class Figure:
    def __init__(self, width, height):
        self.__width = width
        self.__height = height
    def get_length(self):
        return self.__width, self.__height
    def set_length(self, width, height):
        self.__width = width
        self.__height = height
    def area_rectangle(self, width, height):
        if width <= 0 or height <= 0:
            raise ValueError
        return width * height
    def area_ellipse(self, width, height):
        if width <= 0 or height <= 0:
            raise ValueError
        return width * height * math.pi
    def area_right_triangle(self, width, height):
        if width <= 0 or height <= 0:
            raise ValueError
        return width * height / 2

```

```

1  import math
2
3  class Line:
4
5      __width = 0
6      __height = 0
7
8      def __init__(self, width, height):
9          self.__width = width
10         self.__height = height
11
12     def set_length(self, width, height):
13         self.__width = width
14         self.__height = height
15
16     def get_length(self):
17         return self.__width, self.__height
18
19
20     def area_rectangle(width, height) :
21         if width <= 0 or height <= 0 : raise ValueError
22         return width * height
23
24     def area_ellipse(width, height) :
25         if width <= 0 or height <= 0 : raise ValueError
26         return width * height * math.pi
27
28     def area_right_triangle(width, height) :
29         if width <= 0 or height <= 0 : raise ValueError
30         return width * height / 2
31

```

```
kim-euijin@KEJui-MacBookAir cau_oss_python_03 % git branch -l
```

```
[* hw5
```

```
main
```

```
kim-euijin@KEJui-MacBookAir cau_oss_python_03 % git switch main
```

```
[M .DS_Store
```

```
'main' 브랜치로 전환합니다
```

```
브랜치가 'origin/main'에 맞게 업데이트된 상태입니다.
```

```
kim-euijin@KEJui-MacBookAir cau_oss_python_03 % git merge hw5
```

```
[업데이트 중 9badc1d..e4f03e0
```

```
Fast-forward
```

```
figure.py | 36 ++++++++-----
```

```
figure_main.py | 51 ++++++++-----
```

```
2 files changed, 56 insertions(+), 31 deletions(-)
```

```
kim-euijin@KEJui-MacBookAir cau_oss_python_03 %
```