

# Python Programming GUI



# 1. tkinter 모듈

## 1.1 디자인

### 1.1.1 윈도우 만들기

gui.py - D:/workspacePython/gui.py (3.6.3)

File Edit Format Run Options Window Help

```
import tkinter as tk
```

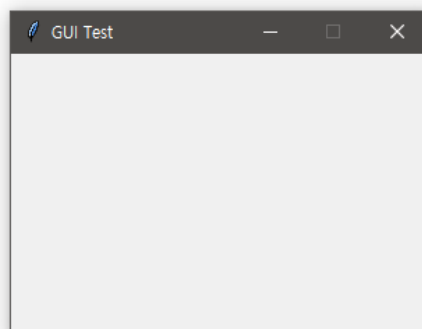
```
window = tk.Tk() # 윈도우 만들기
```

```
window.title("GUI Test")
```

```
window.minsize(300, 200)
```

```
window.resizable(False, False)
```

```
window.mainloop()
```



### 1.1.2 객체 디자인

gui.py - D:/workspacePython/gui.py (3.6.3)

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```
import tkinter as tk
```

```
import tkinter.scrolledtext as tst
```

```
window = tk.Tk() # 윈도우 만들기
```

```
xLabel = tk.Label(window, text="x=") # 라벨
xLabel.grid(row=0, column=0, padx=5, pady=5)
```

```
xVal = tk.StringVar()
xEntry = tk.Entry(window, textvariable=xVal) # 입력박스
xEntry.grid(row=0, column=1, padx=5, pady=5)
xEntry.focus_set()
```

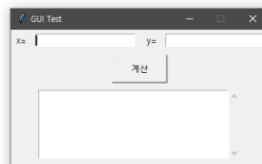
```
yLabel = tk.Label(window, text=" y=")
yLabel.grid(row=0, column=2, padx=5, pady=5)
```

```
yVal = tk.StringVar()
yEntry = tk.Entry(window, textvariable=yVal)
yEntry.grid(row=0, column=3, padx=5, pady=5)
```

```
def calculate():
    print("확인")
```

```
btn = tk.Button(window, width=10, height=2, text="계산", command=calculate) # 버튼
btn.grid(row=1, column=0, columnspan=4, pady=5)
```

```
st = tst.ScrolledText(window, width=30, height=5, state="disabled", font=("Consolas", 12)) # 스크롤 있는 입력박스
st.grid(row=2, column=0, columnspan=4, pady=5)
```



## 1.2 이벤트 처리

```
def calculate():
    hab = int(xVal.get()) + int(yVal.get())
    cha = int(xVal.get()) - int(yVal.get())
    gob = int(xVal.get()) * int(yVal.get())
    moks = int(xVal.get()) / int(yVal.get())

    result = "%s + %s = %d\n" % (xVal.get(), yVal.get(), hab)
    result += "%s - %s = %d\n" % (xVal.get(), yVal.get(), cha)
    result += "%s * %s = %d\n" % (xVal.get(), yVal.get(), gob)
    result += "%s / %s = %d\n" % (xVal.get(), yVal.get(), moks)

    st.configure(state="normal")
    st.delete(1.0, tk.END)
    st.insert(tk.INSERT, result)
    st.configure(state="disabled")
```

