

# LAPORAN PRAKTIKUM INFORMATIKA

## ( Tugas )

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Nama Program : Program Beda tab  
Bahasa Pemrograman : Python  
Compiler / IDE : VS CODE

### 1. Syntax / Sorcecode

```
import tkinter as tk
from tkinter import ttk

window = tk.Tk()
window.title('Aplikasi Data Peserta Didik A1')
window.geometry('900x600')
window.config(bg='lightyellow')

datasasis = []

def tampilkan(frame):
    frame.tkraise()

# HALAMAN 1
hal1 = tk.Frame(window, bg='lightyellow')
halsee = tk.Frame(window, bg='lightyellow')
halsear = tk.Frame(window, bg='lightyellow')

# FUNGSI SIMPAN DATA
def data1():
    nama = entrynamal.get()
    kelas = entrykel1.get()
    alamat = entryala1.get()

    if not nama or not kelas or not alamat:
        labinfo1.config(text='Semua kolom harus diisi!', fg='red')
    else:
        datasasis.append((nama, kelas, alamat))
        labinfo1.config(text='Data berhasil disimpan!', fg='green')
        entrynamal.delete(0, tk.END)
```

```
entrykell.delete(0, tk.END)
entryalal.delete(0, tk.END)

# FUNGSI TAMPIL DATA
def tampildata():
    for i in tree.get_children():
        tree.delete(i)
    for i, item in enumerate(datasis):
        tree.insert('', 'end', iid=i, values=item)
    tampilkan(halsee)

# FUNGSI CARI DATA
def cari_data():
    keyword = entrysear.get().lower()
    for i in tree_cari.get_children():
        tree_cari.delete(i)
    for i, (nama, kelas, alamat) in enumerate(datasis):
        if keyword in nama.lower():
            tree_cari.insert('', 'end', iid=i, values=(nama, kelas,
alamat))
    tampilkan(halsear)

# FORM INPUT HALAMAN 1
labeljudul = tk.Label(hall, text='Form Tambah Data Peserta Didik A1',
                      font=('Times New Roman', 16, 'bold'),
                      bg='lightyellow')
labeljudul.pack(pady=10)

labelnama = tk.Label(hall, text='Nama:', font=('Times New Roman', 12),
                     bg='lightyellow')
labelnama.pack()
entrynama1 = tk.Entry(hall, width=50)
entrynama1.pack()

labelkelas = tk.Label(hall, text='Kelas:', font=('Times New Roman', 12),
                      bg='lightyellow')
labelkelas.pack()
entrykell = tk.Entry(hall, width=50)
entrykell.pack()
```

```
labelalamat = tk.Label(hall, text='Alamat:', font=('Times New Roman', 12), bg='lightyellow')
labelalamat.pack()
entryalamat = tk.Entry(hall, width=50)
entryalamat.pack()

labinfo1 = tk.Label(hall, text='', bg='lightyellow')
labinfo1.pack(pady=5)

butsimpan = tk.Button(hall, text='Simpan Data', font=('Times New Roman', 12), command=data1)
butsimpan.pack(pady=5)

butlihat = tk.Button(hall, text='Lihat Data', font=('Times New Roman', 12), command=tampildata)
butlihat.pack(pady=5)

butcari = tk.Button(hall, text='Cari Data', font=('Times New Roman', 12), command=cari_data)
butcari.pack(pady=5)

# HALAMAN 2 (LIHAT DATA)
labeljudul2 = tk.Label(halsee, text='Data Peserta Didik',
                      font=('Times New Roman', 16, 'bold'),
                      bg='lightyellow')
labeljudul2.pack(pady=10)

# HEADER BIRU UNTUK TABEL
frame_header = tk.Frame(halsee, bg='skyblue')
frame_header.pack(fill='x')
tk.Label(frame_header, text='Nama', width=30, bg='skyblue', font=('Times New Roman', 12, 'bold')).grid(row=0, column=0)
tk.Label(frame_header, text='Kelas', width=20, bg='skyblue', font=('Times New Roman', 12, 'bold')).grid(row=0, column=1)
tk.Label(frame_header, text='Alamat', width=30, bg='skyblue', font=('Times New Roman', 12, 'bold')).grid(row=0, column=2)

tree = ttk.Treeview(halsee, columns=('Nama', 'Kelas', 'Alamat'),
```

```
show='headings')

tree.heading('Nama', text='Nama')
tree.heading('Kelas', text='Kelas')
tree.heading('Alamat', text='Alamat')
tree.pack(fill='both', expand=True, pady=10)

butback1 = tk.Button(halsee, text='Kembali ke Halaman Utama',
                     font=('Times New Roman', 12),
                     command=lambda: tampilkan(hall))
butback1.pack(pady=10)

# ===== HALAMAN 3 (CARI DATA) =====
labeljudul3 = tk.Label(halsear, text='Cari Data Peserta Didik',
                       font=('Times New Roman', 16, 'bold'),
                       bg='lightyellow')
labeljudul3.pack(pady=10)

labelsear = tk.Label(halsear, text='Masukkan Nama:', font=('Times New
Roman', 12), bg='lightyellow')
labelsear.pack()

entrysear = tk.Entry(halsear, width=40)
entrysear.pack(pady=5)

butcar = tk.Button(halsear, text='Cari', font=('Times New Roman', 12),
                   command=cari_data)
butcar.pack(pady=5)

tree_cari = ttk.Treeview(halsear, columns=('Nama', 'Kelas', 'Alamat'),
                        show='headings')
tree_cari.heading('Nama', text='Nama')
tree_cari.heading('Kelas', text='Kelas')
tree_cari.heading('Alamat', text='Alamat')
tree_cari.pack(fill='both', expand=True, pady=10)

butback2 = tk.Button(halsear, text='Kembali ke Halaman Utama',
                     font=('Times New Roman', 12),
                     command=lambda: tampilkan(hall))
butback2.pack(pady=10)
```

```
# TAMPILKAN FRAME
for frame in (hall1, halsee, halsear):
    frame.place(x=0, y=0, relwidth=1, relheight=1)

tampilkan(hall1)
window.mainloop()
```

## 2. Penjelasan Syntax

Program ini menggunakan tkinter untuk membuat aplikasi GUI sederhana dengan tiga fitur utama yaitu menambah data, melihat data, dan mencari data peserta didik. Pada halaman pertama pengguna dapat mengisi nama, kelas, dan alamat, lalu menekan tombol Simpan Data untuk menyimpan informasi tersebut ke dalam list. Jika ada kolom yang kosong, muncul pesan peringatan. Tombol Lihat Data digunakan untuk menampilkan semua data yang sudah disimpan dalam bentuk tabel Treeview pada halaman kedua, sedangkan tombol Cari Data digunakan untuk membuka halaman pencarian berdasarkan nama. Warna latar belakang aplikasi adalah kuning muda dan tabel pada halaman kedua memiliki header berwarna biru agar tampilan lebih jelas.

## 3. Output Program

The image consists of three screenshots of a Windows application window titled "Aplikasi Data Peserta Didik A1".

**Screenshot 1: Cari Data Peserta Didik**

This screenshot shows a search interface. At the top, there is a search bar labeled "Masukkan Nama:" with the placeholder text "Cari". Below the search bar is a table with columns "Nama", "Kelas", and "Alamat". Two rows of data are visible: one row with "xS" in the Nama column and "r" in the Kelas column; another row with "c" in the Kelas column. At the bottom of the window is a button labeled "Kembali ke Halaman Utama".

**Screenshot 2: Form Tambah Data Peserta Didik A1**

This screenshot shows a form for adding new student data. It has fields for "Nama:", "Kelas:", and "Alamat:". Below these fields are three buttons: "Simpan Data", "Lihat Data", and "Cari Data".

**Screenshot 3: Data Peserta Didik**

This screenshot shows a list of student data. The table has columns "Nama", "Kelas", and "Alamat". One row of data is visible: "xS" in the Nama column, "r" in the Kelas column, and "c" in the Alamat column. At the bottom of the window is a button labeled "Kembali ke Halaman Utama".