

Create Task 2023 - My Code

AP Computer Science Principles

```
1  from tkinter import *
2  from tkinter.ttk import *
3
4  importance1 = 0
5  itemlist = {}
6  tk = Tk()
7  tk.geometry('400x400')
8  maintext = Label(tk, text='Advanced To-Do List', font=('calibre', 10, 'bold'))
9  maintext.pack(pady=10)
10
11
12 def sortdictbyimportance(pdict):
13     i1, i2, i3 = 'Importance Level 1:\n', 'Importance Level 2:\n', 'Importance Level 3:\n'
14
15     for i in pdict:
16         if int(pdict[i]) == 1:
17             i1 += f'    -= {i}\n'
18         elif int(pdict[i]) == 2:
19             i2 += f'    -= {i}\n'
20         else:
21             i3 += f'    -= {i}\n'
22
23     return f'Things to do:\n-----\n{i3}\n{i2}\n{i1}'
24
25
26 def mainmenu(pvar):
27     if not pvar:
28         addbutton.pack_forget()
29         printbutton.pack_forget()
30         delbutton.pack_forget()
31     else:
32         addbutton.pack(pady=10)
33         printbutton.pack(pady=10)
34         delbutton.pack(pady=10)
35
36
37 def additem():
38     namevar = ''
39     importancevar = ''
40
41     def submit():
42         global namevar, importancevar, itemlist
43         namevar = str(field1.get())
44         importancevar = str(field2.get())
45         itemlist[namevar] = importancevar
46         print(itemlist)
47
48         label1.pack_forget()
49         field1.pack_forget()
50         label2.pack_forget()
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        field2.pack_forget()
        button1.pack_forget()
        backbutton.pack_forget()

    mainmenu(True)

mainmenu(False)
label1 = Label(tk, text='Type name of the item')
label1.pack(pady=10)
field1 = Entry(tk, namevar, font=('calibre', 10, 'normal'))
field1.pack(pady=10)
label2 = Label(tk, text='Type importance LVL of the item (1-3)')
label2.pack(pady=10)
field2 = Entry(tk, importancevar, font=('calibre', 10, 'normal'))
field2.pack(pady=10)
button1 = Button(tk, text='Submit', command=submit)
button1.pack(pady=10)

def back():
    label1.pack_forget()
    field1.pack_forget()
    label2.pack_forget()
    field2.pack_forget()
    button1.pack_forget()
    backbutton.pack_forget()

    mainmenu(True)

backbutton = Button(tk, text='Back', command=back)
backbutton.pack(pady=10)

def printitems():
    def back():
        itemstext.pack_forget()
        backbutton.pack_forget()
        mainmenu(True)

    mainmenu(False)
    print(itemlist)
    if len(itemlist) < 1:
        itemstext = Label(tk, text='You have nothing to do!')
    else:
        itemstext = Label(tk, text=(sortdictbyimportance(itemlist)))
    itemstext.pack(pady=10)
    backbutton = Button(tk, text='Back', command=back)
    backbutton.pack(pady=10)

def removeitem():
    item = ''
    mainmenu(False)

    def submit():
        global item

```

```
    item = field1.get()
    del (itemlist[item])

    label1.pack_forget()
    field1.pack_forget()
    button1.pack_forget()
    backbutton.pack_forget()

    mainmenu(True)

label1 = Label(tk, text='What item to remove? [Case sensitive]')
label1.pack(pady=10)
field1 = Entry(tk, item, font=('calibre', 10, 'normal'))
field1.pack(pady=10)
button1 = Button(tk, text='Submit', command=submit)
button1.pack(pady=10)

def back():
    label1.pack_forget()
    field1.pack_forget()
    button1.pack_forget()
    backbutton.pack_forget()

    mainmenu(True)

backbutton = Button(tk, text='Back', command=back)
backbutton.pack(pady=10)

addbutton = Button(tk, text='Add an item', command=additem)
addbutton.pack(pady=10)
printbutton = Button(tk, text='Print the list of items', command=printitems)
printbutton.pack(pady=10)
delbutton = Button(tk, text='Delete an item', command=removeitem)
delbutton.pack(pady=10)

mainloop()
```