

CODE

```
⚡ settings.py > [Θ] app_name
1   filename="expenses.csv"
2   budget_file="budget.txt"
3   app_name="Pocket Guard App"
```

```
⚡ database.py > ⌂ delete_row
1   import csv
2   import os
3   import settings
4
5   def get_all():
6       l = []
7       if os.path.exists(settings.filename):
8           with open(settings.filename, "r") as f:
9               r = csv.reader(f)
10              for row in r:
11                  l.append(row)
12
13      return l
14
15  def save_one(name, price):
16      with open(settings.filename, "a", newline="") as f:
17          w = csv.writer(f)
18          w.writerow([name, price])
19
20  def save_budget_limit(amount):
21      with open(settings.budget_file, "w") as f:
22          f.write(str(amount))
23
24  def get_budget_limit():
25      if not os.path.exists(settings.budget_file):
26          return 5000.0
27      with open(settings.budget_file, "r") as f:
28          data = f.read()
29          return float(data)
```

```
29
30  def delete_row(line_number):
31      rows = get_all()
32      idx = line_number - 1
33
34      if idx < 0 or idx >= len(rows):
35          return False
36      rows.pop(idx)
37      with open(settings.filename, "w", newline="") as f:
38          w = csv.writer(f)
39          w.writerows(rows)
40
41      return True
```

```
logic.py > calc_total
1 def calc_total(data):
2     t = 0
3     for row in data:
4         p = float(row[1])
5         t = t + p
6     return t
7
8 def check_warning(total, limit):
9     if total > limit:
10        return "Warning: Over Budget!!"
11    else:
12        left = limit - total
13    return f"Safe. (Remaining: {left})"
```

```
interface.py > run_app
1 import tkinter as tk
2 from tkinter import simpledialog, messagebox
3 import database
4 import logic
5 import settings
6
7 def run_app():
8
9     root = tk.Tk()
10    root.title(settings.app_name)
11    root.geometry("300x500")
12
13    l1 = tk.Label(root, text="Item Name:")
14    l1.pack(pady=5)
15    e1 = tk.Entry(root)
16    e1.pack()
17
18    l2 = tk.Label(root, text="Price:")
19    l2.pack(pady=5)
20    e2 = tk.Entry(root)
21    e2.pack()
22
23    def btn_add():
24        n = e1.get()
25        p = e2.get()
26
27        if n == "" or p == "":
28            messagebox.showerror("Error", "type something")
29            return
30        try:
31            database.save_one(n, p)
32            messagebox.showinfo("Saved", "Added item")
33            e1.delete(0, tk.END)
34            e2.delete(0, tk.END)
```

```

34         e2.delete(0, tk.END)
35     except:
36         print("save error")
37
38     def btn_view():
39         d = database.get_all()
40         text = ""
41         i = 1
42         for row in d:
43             text = text + str(i) + ". " + row[0] + " : " + row[1] + "\n"
44             i = i + 1
45
46     messagebox.showinfo("My List", text)
47
48     def btn_total():
49         d = database.get_all()
50         limit = database.get_budget_limit()
51         ans = logic.calc_total(d)
52         stat = logic.check_warning(ans, limit)
53         msg = f"Total Spent: {ans}\nMy Budget: {limit}\n{stat}"
54         messagebox.showinfo("Report", msg)
55
56     def btn_set_budget():
57         new_b = simpledialog.askfloat("Budget", "Enter new budget limit:")
58         if new_b is not None:
59             database.save_budget_limit(new_b)
60             messagebox.showinfo("Done", "Budget Updated")
61

```

```

61
62     def btn_delete():
63         btn_view()
64         num = simpledialog.askinteger("Delete", "Enter line number to delete:")
65
66         if num is not None:
67             success = database.delete_row(num)
68             if success:
69                 messagebox.showinfo("Deleted", "Item removed")
70             else:
71                 messagebox.showerror("Error", "Invalid line number")
72
73     b1 = tk.Button(root, text="Add Item", command=btn_add, bg="white")
74     b1.pack(pady=10)
75
76     b2 = tk.Button(root, text="View All", command=btn_view)
77     b2.pack(pady=5)
78
79     b3 = tk.Button(root, text="Check Total", command=btn_total, bg="lightgrey")
80     b3.pack(pady=5)
81
82     b4 = tk.Button(root, text="Set Budget", command=btn_set_budget, bg="orange")
83     b4.pack(pady=5)
84
85     b5 = tk.Button(root, text="Delete Item", command=btn_delete, bg="red", fg="white")
86     b5.pack(pady=10)
87
88     root.mainloop()

```

main.py > ...

```

1  import interface
2  if __name__ == "__main__":
3      interface.run_app()

```

OUTPUT







