

trinket

Python3

Run

main.py

```
1 # Starting file for Exercise 3-1
2
3 # display a welcome message
4 print("The Miles Per Gallon application")
5 print()
6
7 repeat_msg = "y"
8
9 while repeat_msg.lower() == "y":
10     # get input from the user
11     miles_driven = float(input("Enter miles driven:  "))
12     gallons_used = float(input("Enter gallons of gas used:  "))
13     cost_per_gallon = float(input("Enter cost per gallon:  "))
14
15     if miles_driven <= 0:
16         print("\nMiles driven must be greater than zero. Please try again.")
17     elif gallons_used <= 0:
18         print("\nGallons used must be greater than zero. Please try again.")
19     elif cost_per_gallon <= 0:
20         print("\nCost per gallon of gas must be greater than zero. Please try again.")
21     else:
22         # inputs must be good
23         # calculate entered data
24         mpg = round((miles_driven / gallons_used), 2)
25         tgc = round((gallons_used * cost_per_gallon), 2)
26         cpm = round((tgc / miles_driven), 1)
27
28         #display calculated values
29         print("\nMiles Per Gallon:      ", mpg)
30         print("Total Gas Cost:          ", tgc)
31         print("Cost Per Mile:             ", cpm)
32         print()
33
34         #Ask if user wants to repeat
35         repeat_msg = input("\nGet entries for another trip (y/n)?")
36         print()
37
38 print("\nBye!")
39
40
```

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The Miles Per Gallon application

Enter miles driven: 150
Enter gallons of gas used: 15
Enter cost per gallon: 4

Miles Per Gallon: 10.0
Total Gas Cost: 60.0
Cost Per Mile: 0.4

Get entries for another trip (y/n)? y

Enter miles driven: 225
Enter gallons of gas used: 16
Enter cost per gallon: 3

Miles Per Gallon: 14.06
Total Gas Cost: 48.0
Cost Per Mile: 0.2

Get entries for another trip (y/n)? n

Bye!

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main.py

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1 # starting file for Exercise 3-2

2

3 # be sure to follow along with my video demonstration video in our Canvas assignment instruct

4

5 # display a welcome message

6 print("The test scores program\n")

7 print("Enter test scores")

8 print("Enter 'end' to end input")

9 print("=====")

10

11 anotherSet = "y"

12

13 while anotherSet.lower() == "y":

14 # initialize variables for a new set

15 counter = 0

16 score_total = 0

17

18 while True:

19 test_score_input = input("Enter test score: ").strip()

20

21 if test_score_input.lower() == "end":

22 break

23

24 try:

25 test_score = int(test_score_input)

26 if 0 <= test_score <= 100:

27 score_total += test_score

28 counter += 1

29 else:

30 print("Test score must be from 0 through 100. Try again.")

31 except ValueError:

32 print("Invalid input. Please enter a number or 'end'.")

33

34 if counter > 0:

35 #calculate average score

36 average_score = round(score_total / counter)

37 #format and display results

38 print("=====")

39 print("Total Score:", score_total)

40 print("Average Score:", average_score)

41 else:

42 print("\nInvalid scores were entered.")

43 #ask for another set

44 anotherSet = input("\nEnter another set of test scores (y/n)? ").strip().lower()

45

46 print("\nGoodbye. Thanks for using the test scores program!")

47

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The test scores program

Enter test scores

Enter 'end' to end input

=====

Enter test score: 85

Enter test score: 75

Enter test score: 95

Enter test score: end

=====

Total Score: 255

Average Score: 85

Enter another set of test scores (y/n)? n

Goodbye. Thanks for using the test scores program!