LAB

Day 2 — Fix and Finish with Editor Tools

Warm-Up Arcade: Online

Name: _____ Date: _____

Directions

1. Type the game link below. It opens Warm-Up Arcade in CodeGrove, our online game.
2. Do both tasks in the game. Press Check until your code works.
3. Clear the Input panel with its trash button. Type what this sheet says the user types, one answer on each line. Then press Run.
4. On this sheet, write your fixed program and the exact output from the Output panel. Then answer each Why question.

Game link: madlyproductivepathways.com/codegrove?course=python2&level=1.1b

Check tells you if your code works. It is not your grade. You may use up to three hints.

Each question has a tag that shows where to do the work.

Use CodeGrove Do the work in CodeGrove. Then write your final answer on this sheet.

Paper only Answer on this sheet. You don't need the game.

How do you earn points?

Each task is worth 6 points: 2 for the code you write, 2 for the exact output and 2 for the Why answer.
The sheet is worth 12 points.

Task 1: Tip Total

Turn off the test line, and add a whole-number tip percent to the bill.

1. Type `#` in front of the test line to turn it off.

2. Multiply `bill` by `1 + tip / 100` with `*=`.

3. Match the Example output exactly.

Tip: A test line sets a value while you work. Turn it off when you finish.

Example 1

Input

```
20.00
15
```

Output

```
Bill? 20.00
Tip percent? 15
Total: $23.00
```

1. Write your whole fixed program, with the test line turned off. (2 points) Use CodeGrove

Starter code

```
# Stonebridge Skate Park snack stand
bill = float(input("Bill? "))
tip = int(input("Tip percent? "))
# Test value: turn this line off when you finish.
bill = 10
# Add the tip to the bill with *=.

print(f"Total: ${bill:.2f}")
```

Write your whole fixed program in the box below.

main.py

```
1
2
3
4
5
6
7
8
9
10
```

2. Write the exact output when the user types 35.00 and then 10. (2 points) Use CodeGrove

Output

3. Before you turned off the test line, why did every bill give the same total? Answer in 1 or 2 sentences. (2 points) Paper only

Task 2: Grade Sorter

Fix the error, and turn the points into a percent. The points possible are always above 0.

1. Read the Error panel. It names the line to fix.

2. Divide `score` by `possible` with `/=`.

3. Then multiply `score` by 100 with `*=`.

Tip: Press Run after each change, and read the Error panel again.

Example 1

Input

```
18
20
```

Output

```
Points earned? 18
Points possible? 20
90.0% is an A
```

4. Write your whole fixed program. (2 points)

Use CodeGrove

Starter code

```
# Stonebridge Skate Park trick class grades
earned = int(input("Points earned? "))
possible = int(input("Points possible? "))
score = earned
# Divide by possible with /=. Then multiply by 100 with *=.


if score >= 90:
    print(f"{score}% is an A")
elif score >= 80
    print(f"{score}% is a B")
else:
    print(f"{score}% is a C")
```

Write your whole fixed program in the box below.

main.py

```

```

5. Write the exact output when the user types 33 and then 40. (2 points)

Use CodeGrove

Output

6. The program stopped before it asked for any points. How did the Error panel help you find the bug? Answer in 1 or 2 sentences. (2 points)

Paper only